

NWS- Forecast: MIDDLE TANANA VALLEY- INCLUDING...FAIRBANKS
612 AM ADT TUE APR 15 2008

TODAY...MOSTLY CLOUDY WITH OCCASIONAL FLURRIES. HIGHS AROUND 30. WEST WINDS TO 15 MPH. **.TONIGHT...**MOSTLY CLOUDY WITH FLURRIES. LOWS 10 TO 15. WEST WINDS TO 15 MPH.

WEDNESDAY...MOSTLY CLOUDY WITH A CHANCE OF SNOW IN THE AFTERNOON. HIGHS 25 TO 30. WEST WINDS 10 TO 20 MPH. **WEDNESDAY NIGHT...**CLOUDY WITH A CHANCE OF SNOW. LOWS AROUND 10 ABOVE. SOUTHWEST WINDS 5 TO 15 MPH.

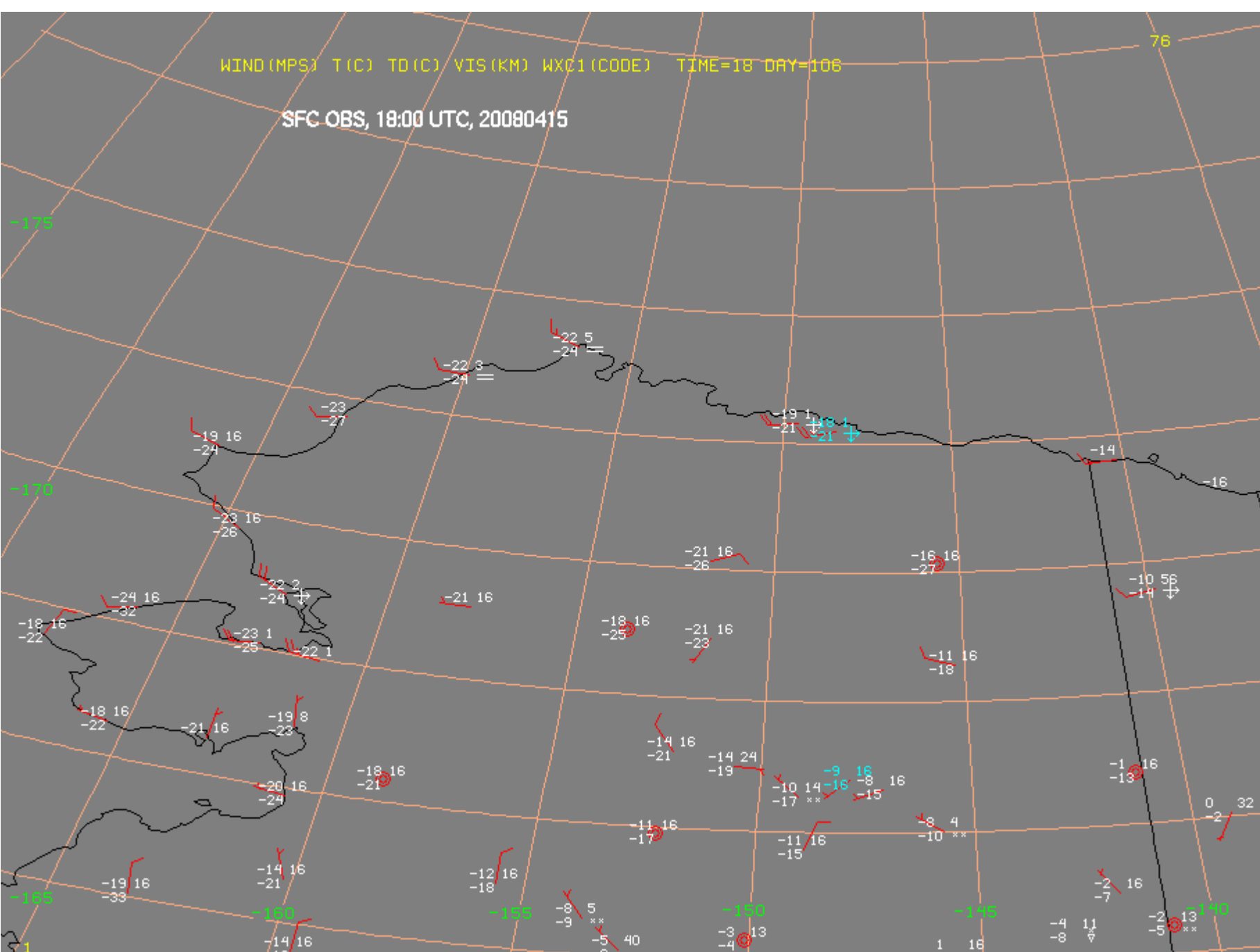
THURSDAY...MOSTLY CLOUDY WITH A CHANCE OF SNOW. HIGHS 30 TO 35. WEST WINDS TO 15 MPH. **.THURSDAY NIGHT...**PARTLY CLOUDY. LOWS NEAR 10 ABOVE.

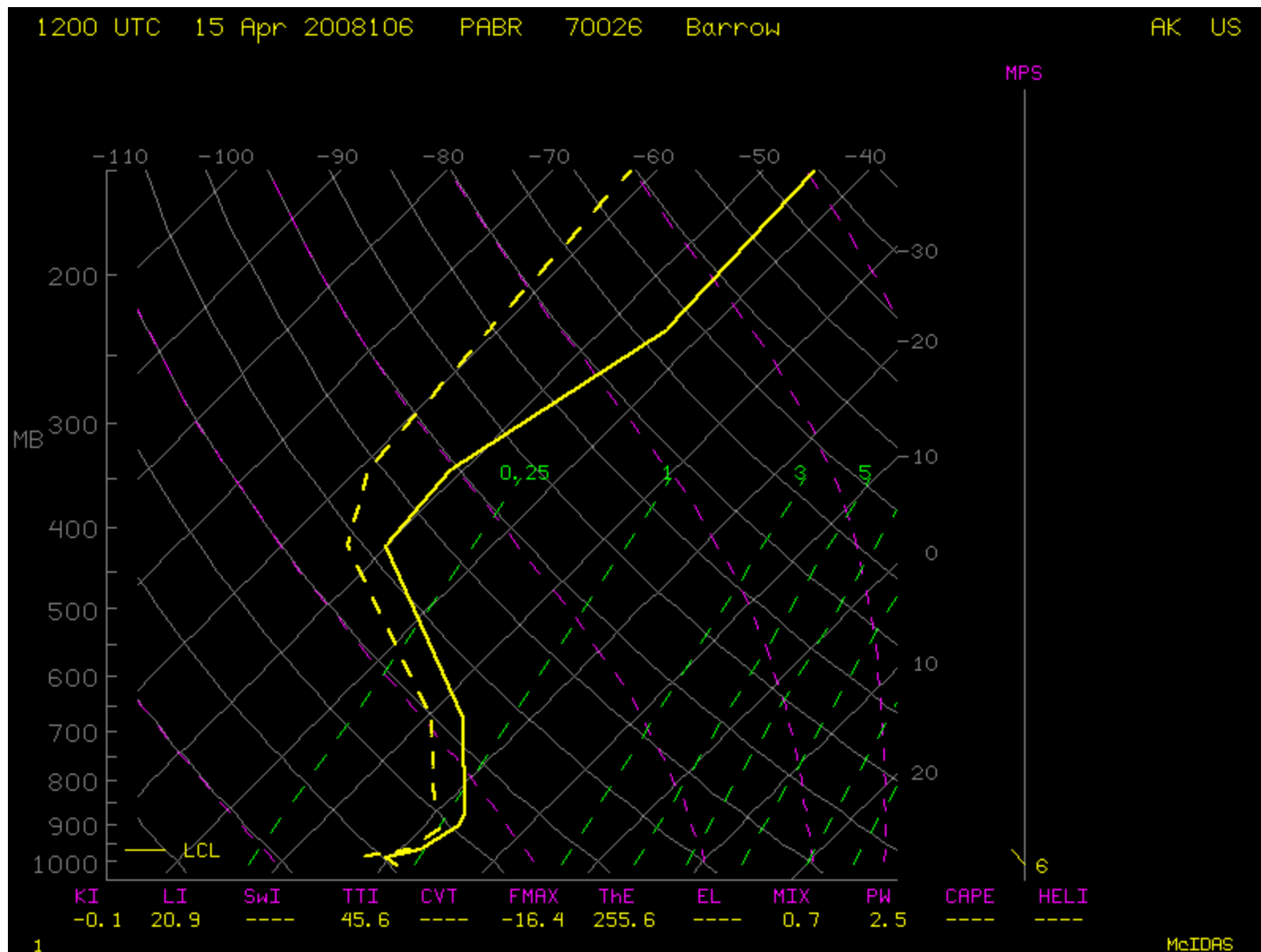
FRIDAY...PARTLY CLOUDY. HIGHS NEAR 35. **.FRIDAY NIGHT...**MOSTLY CLOUDY. LOWS NEAR 15.

SATURDAY...MOSTLY CLOUDY. HIGHS NEAR 40. **.SATURDAY NIGHT...**PARTLY CLOUDY. LOWS NEAR 25.

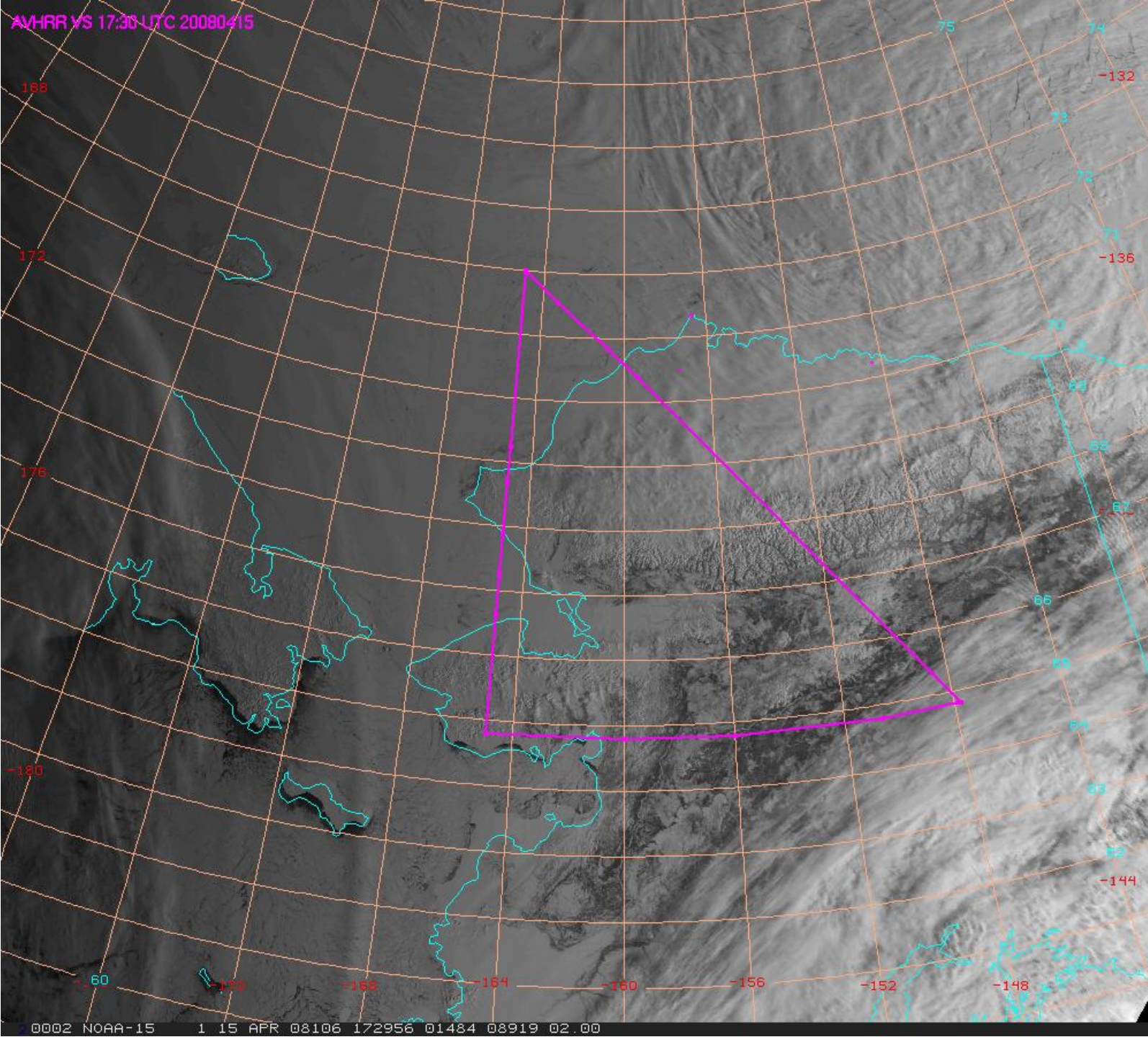
SUNDAY...PARTLY CLOUDY. HIGHS NEAR 45.

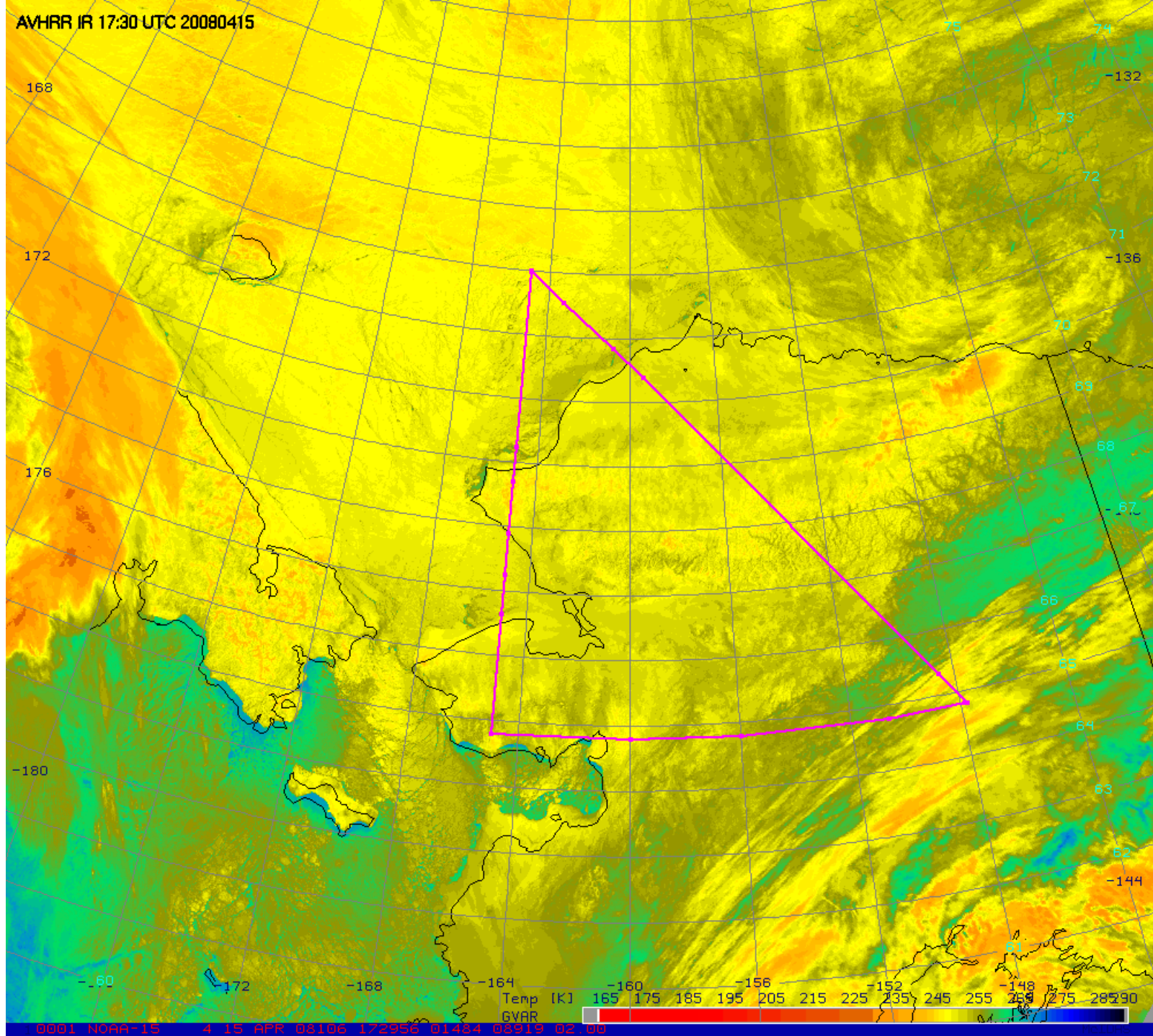
SFC OBS, 18:00 UTC, 20080415

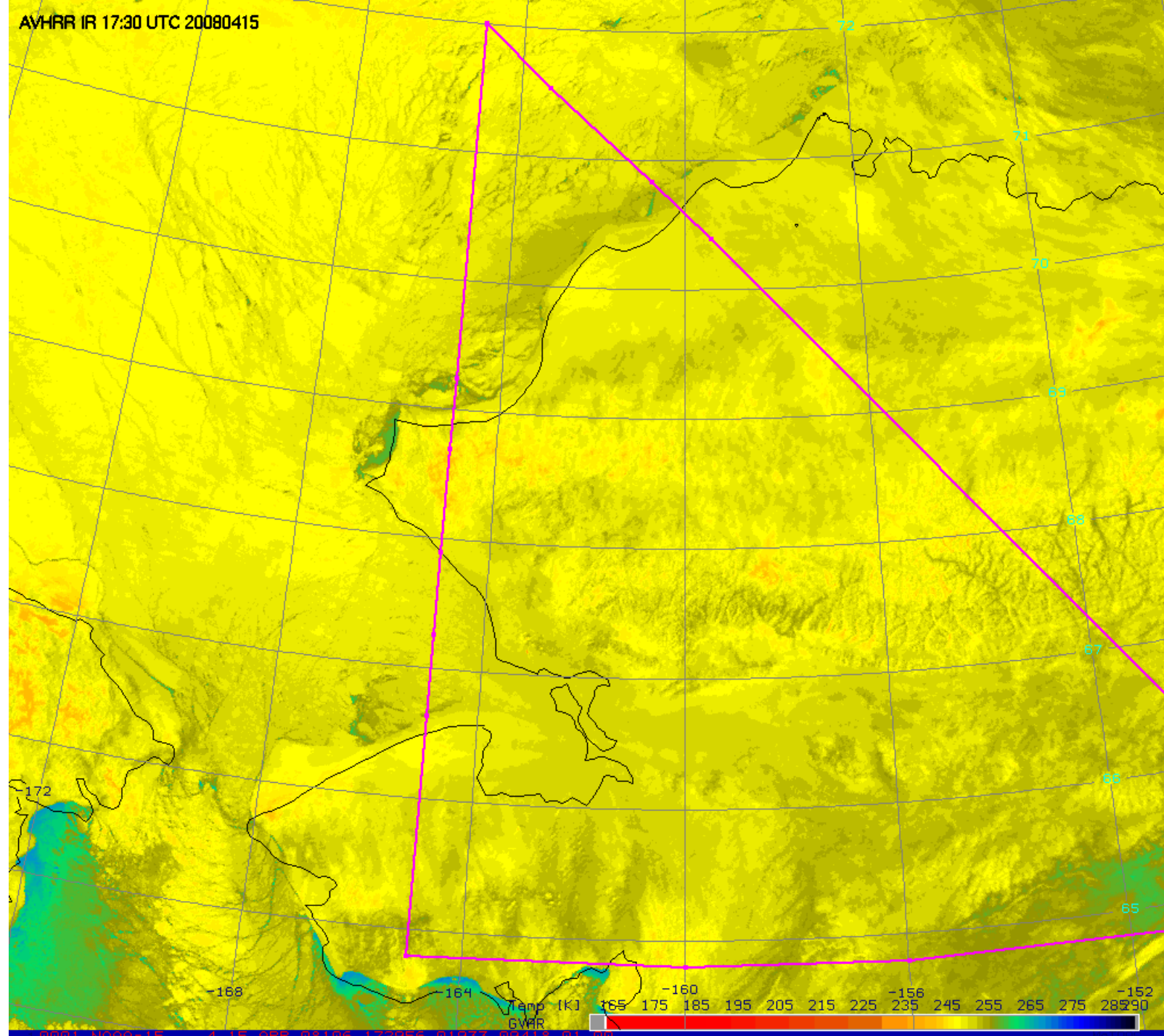


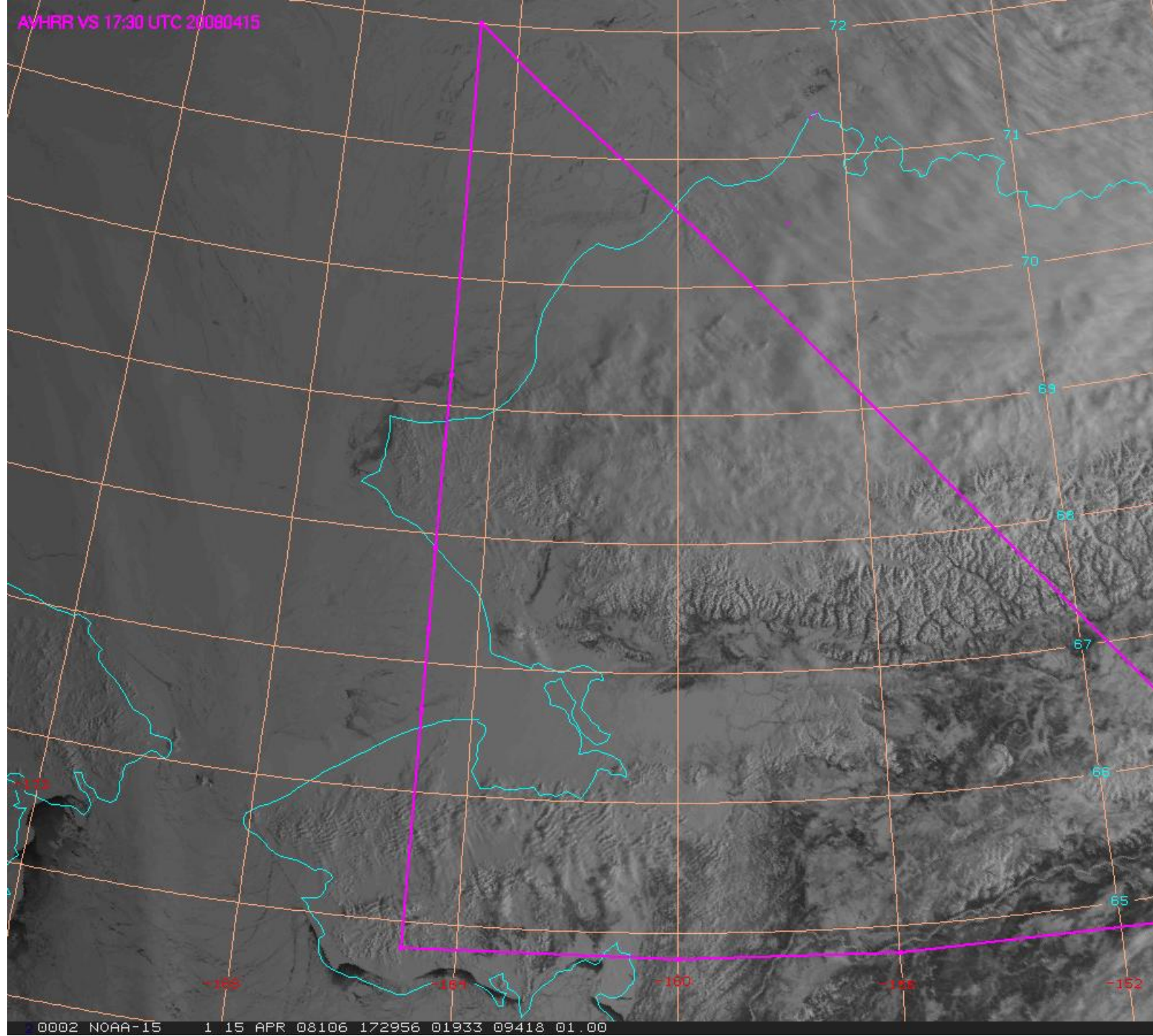


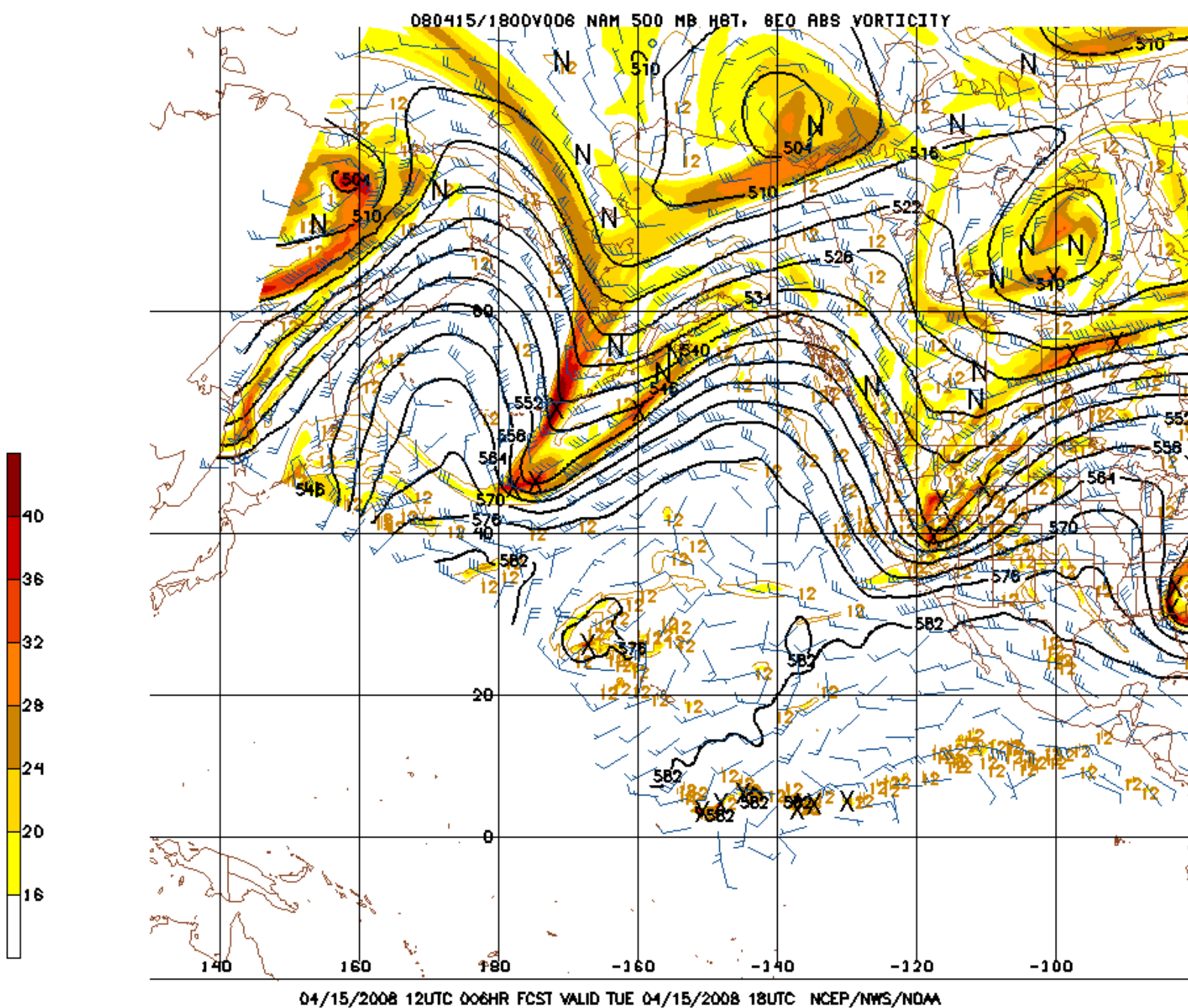
This morning's sounding from Barrow



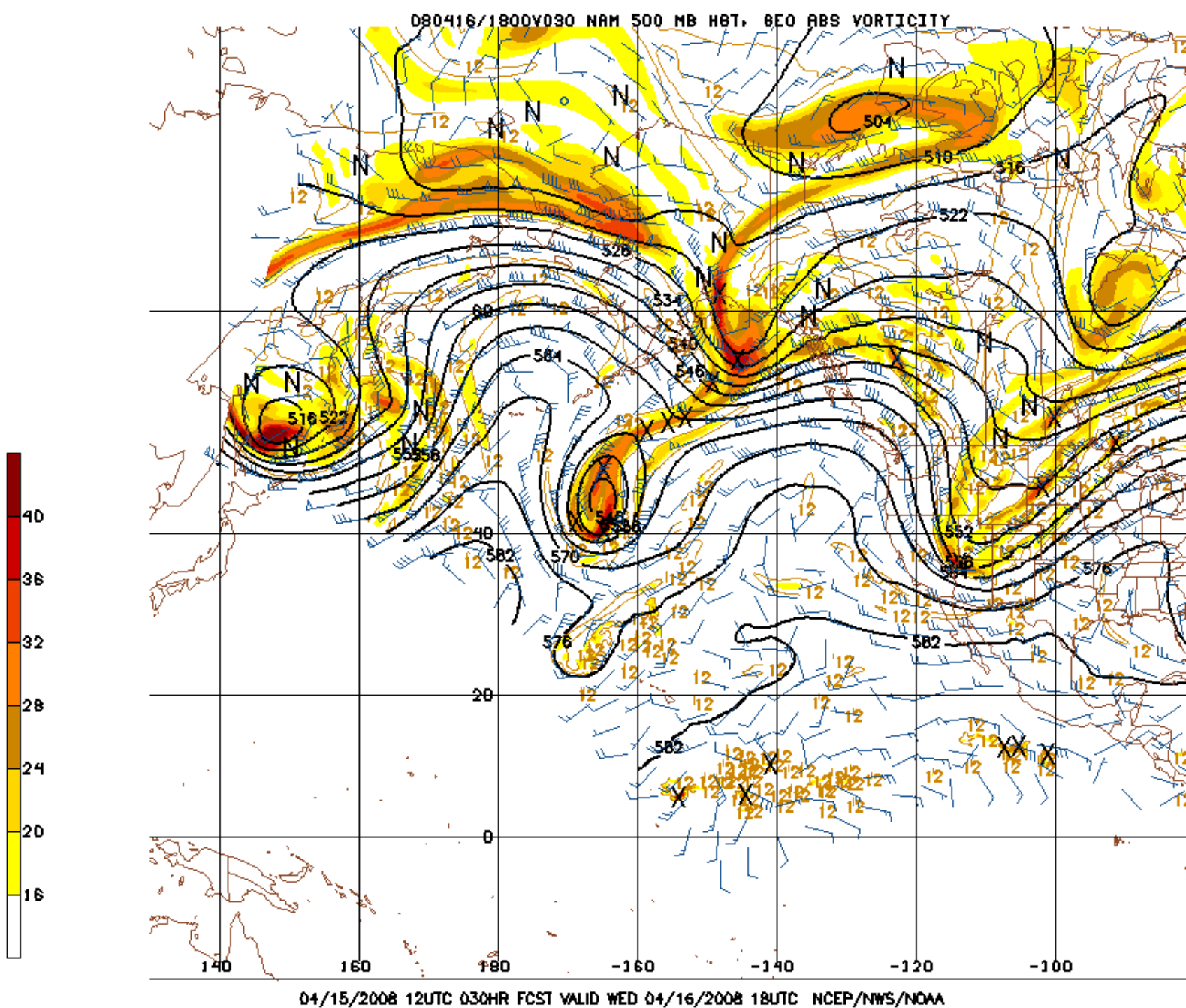




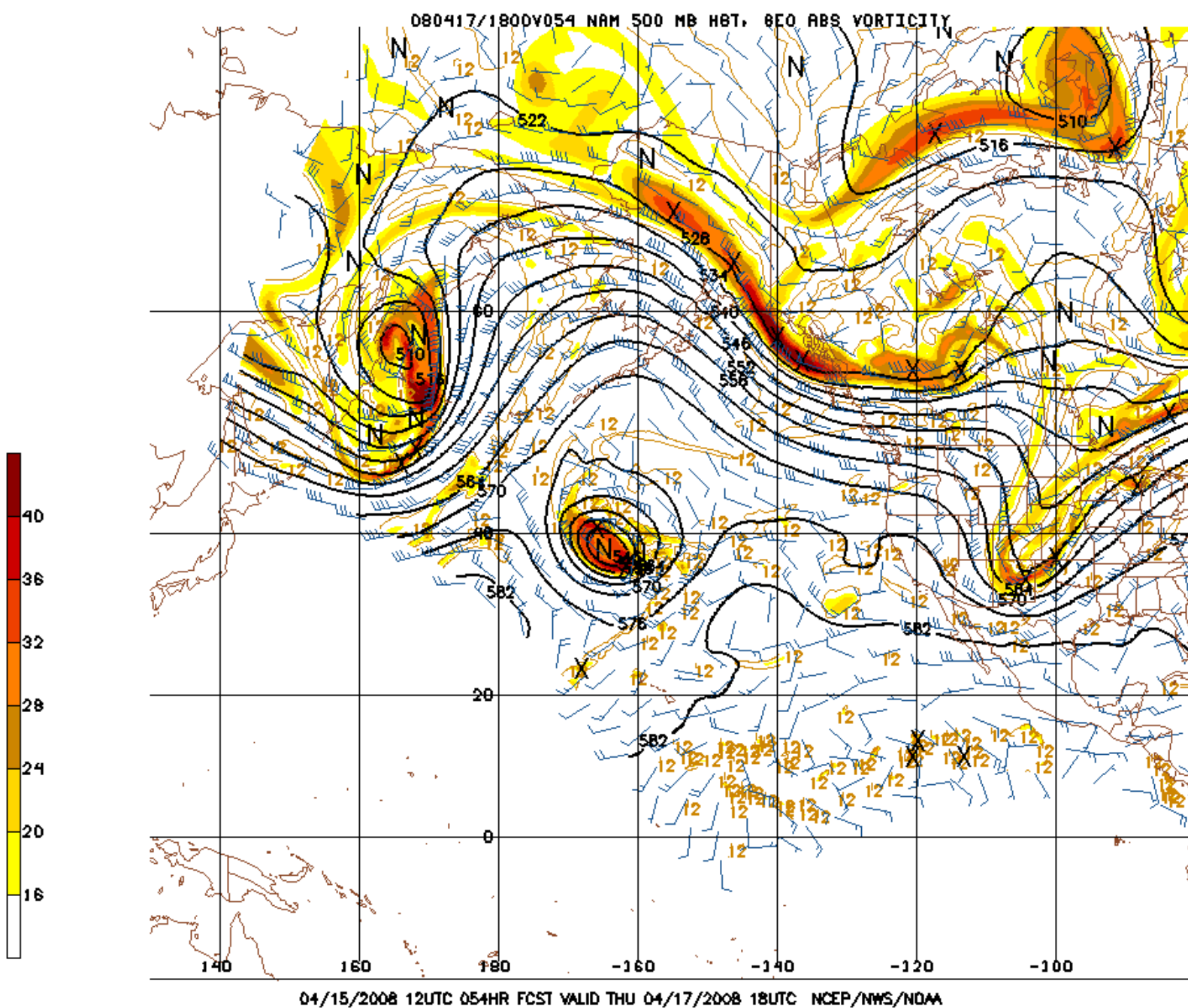




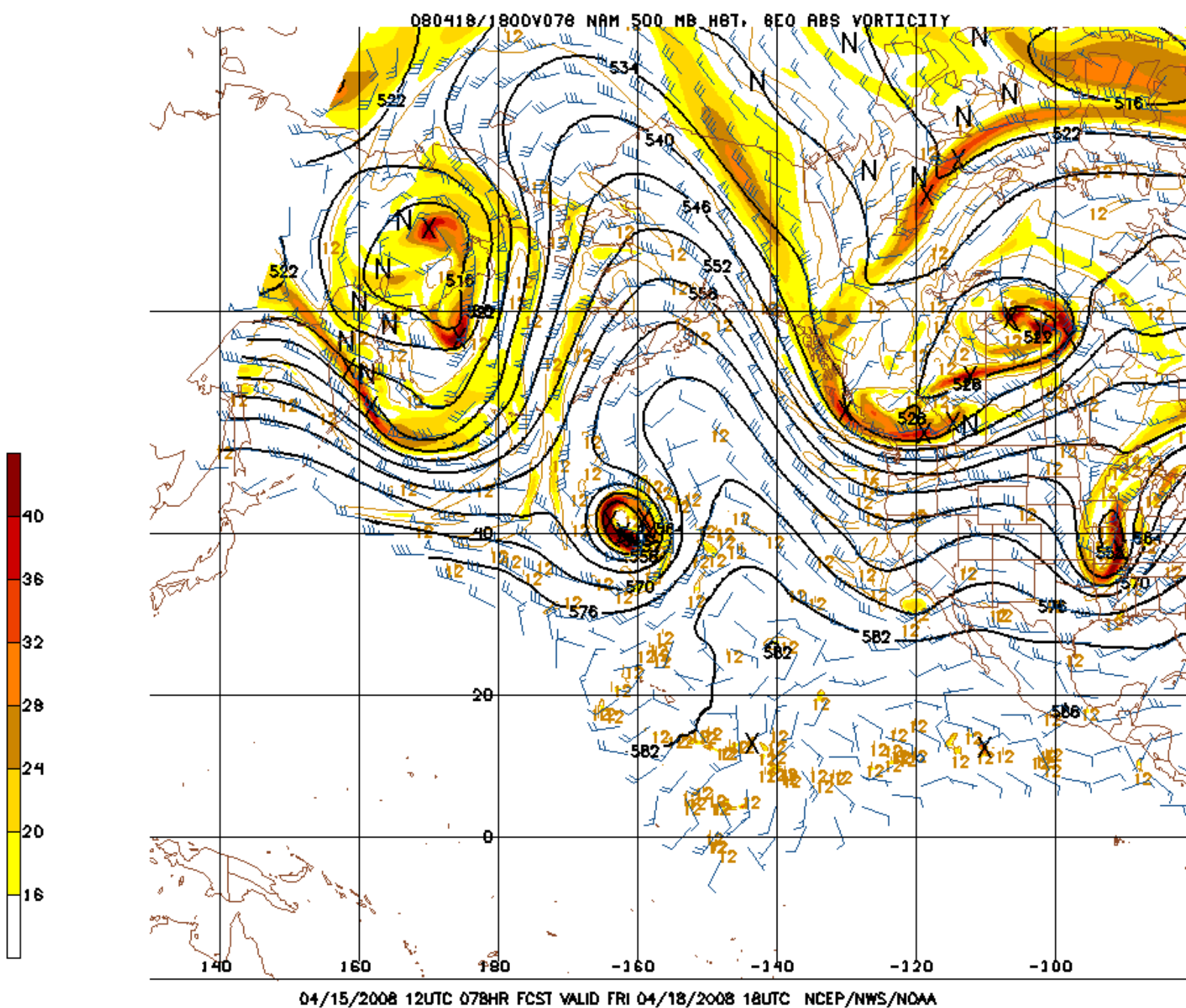
NAM 500 hPa geopotential, 10:00 AM local, Tuesday



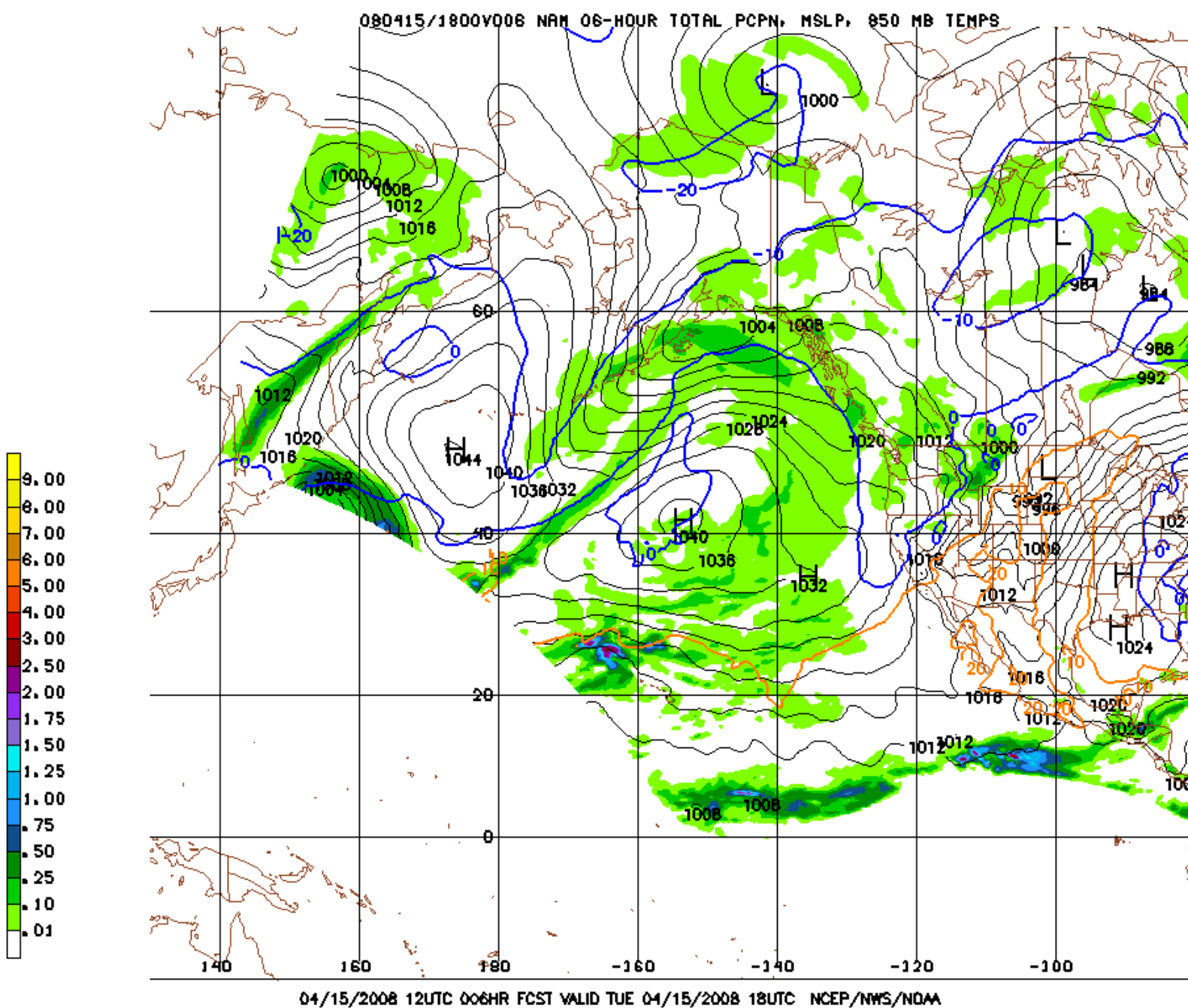
NAM 500 hPa geopotential, 10:00 AM local, Wednesday



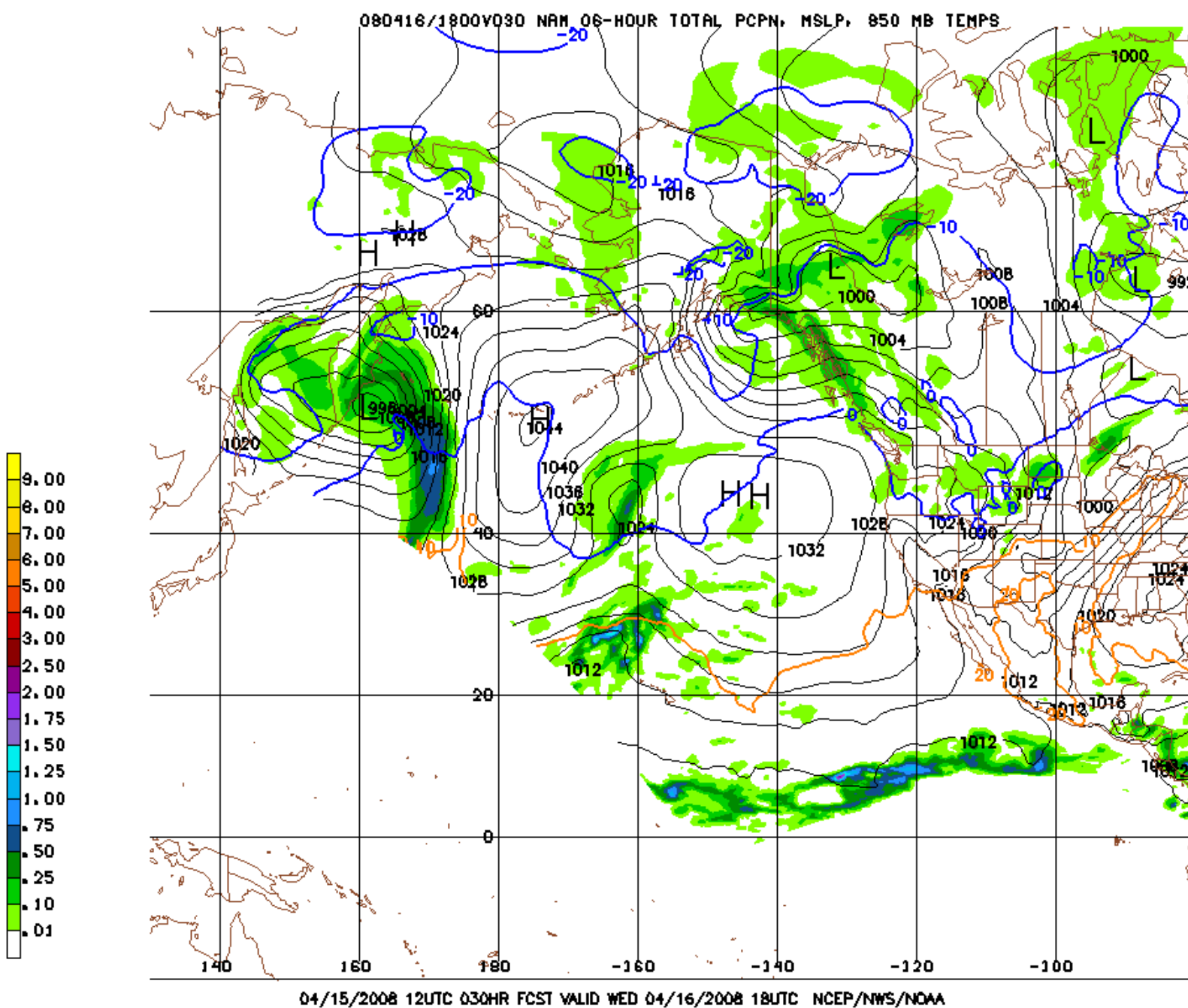
NAM 500 hPa geopotential, 10:00 AM local, Thursday



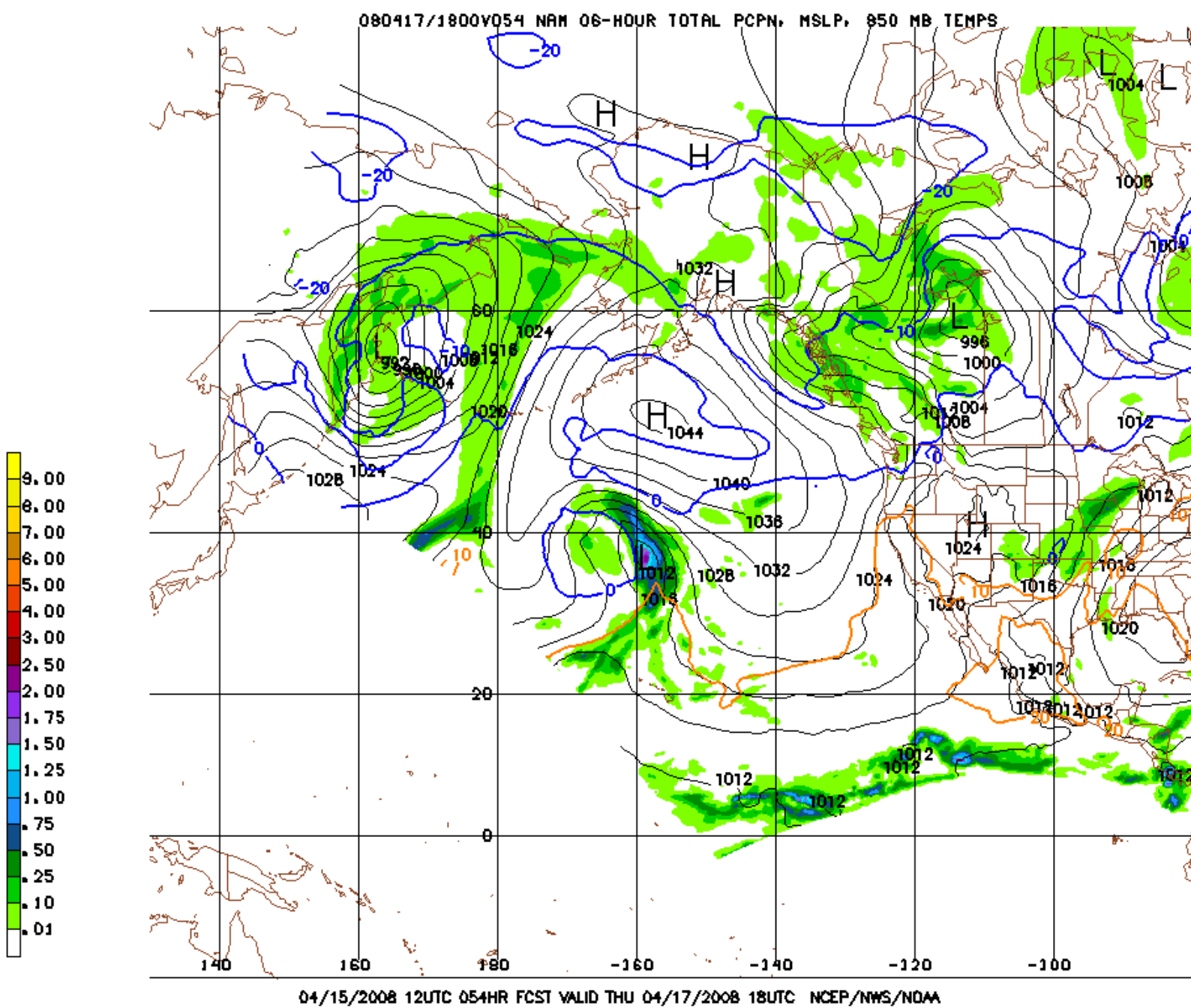
NAM 500 hPa geopotential, 10:00 AM local, Friday



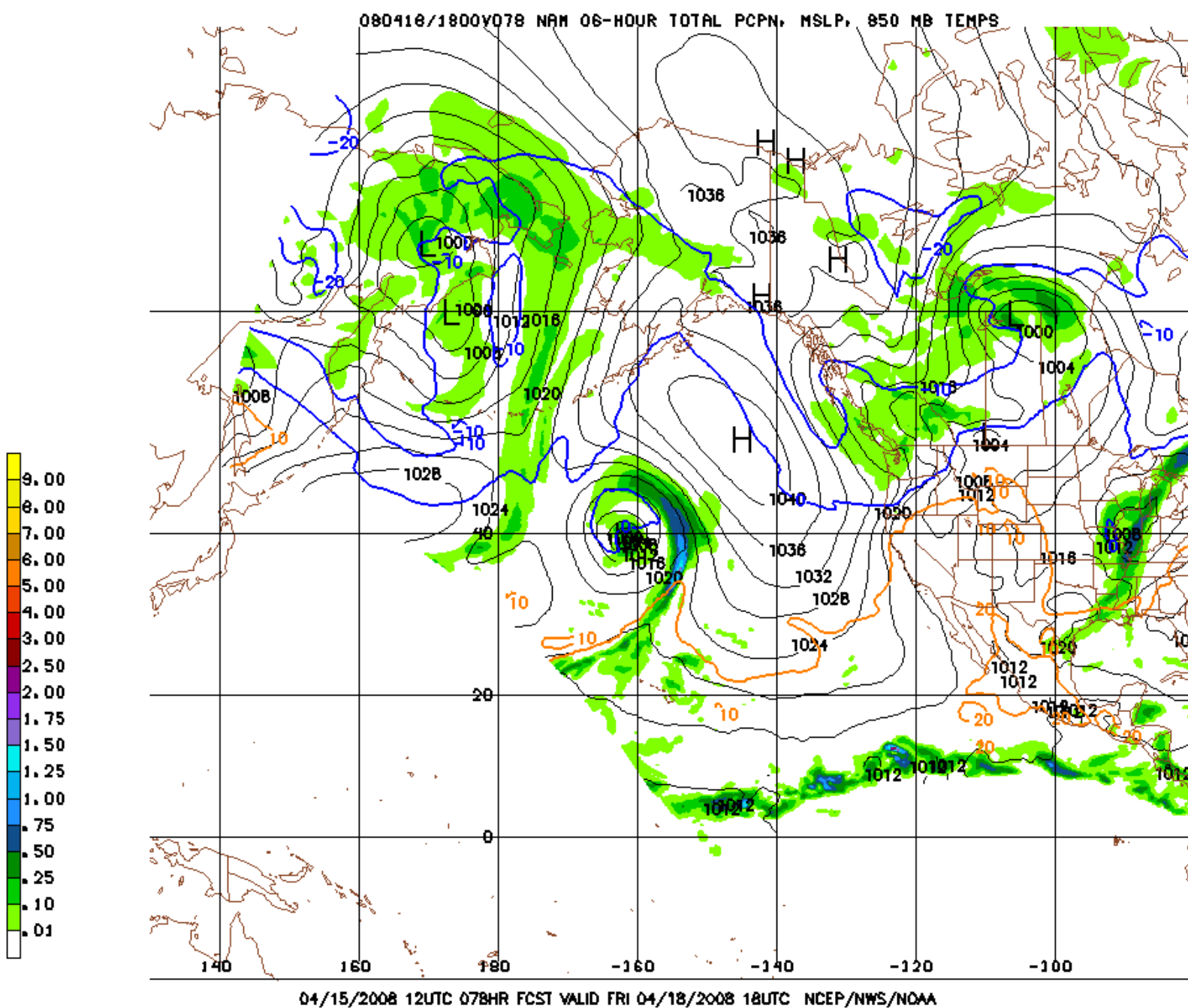
NAM MSLP, 10:00 AM local, Tuesday



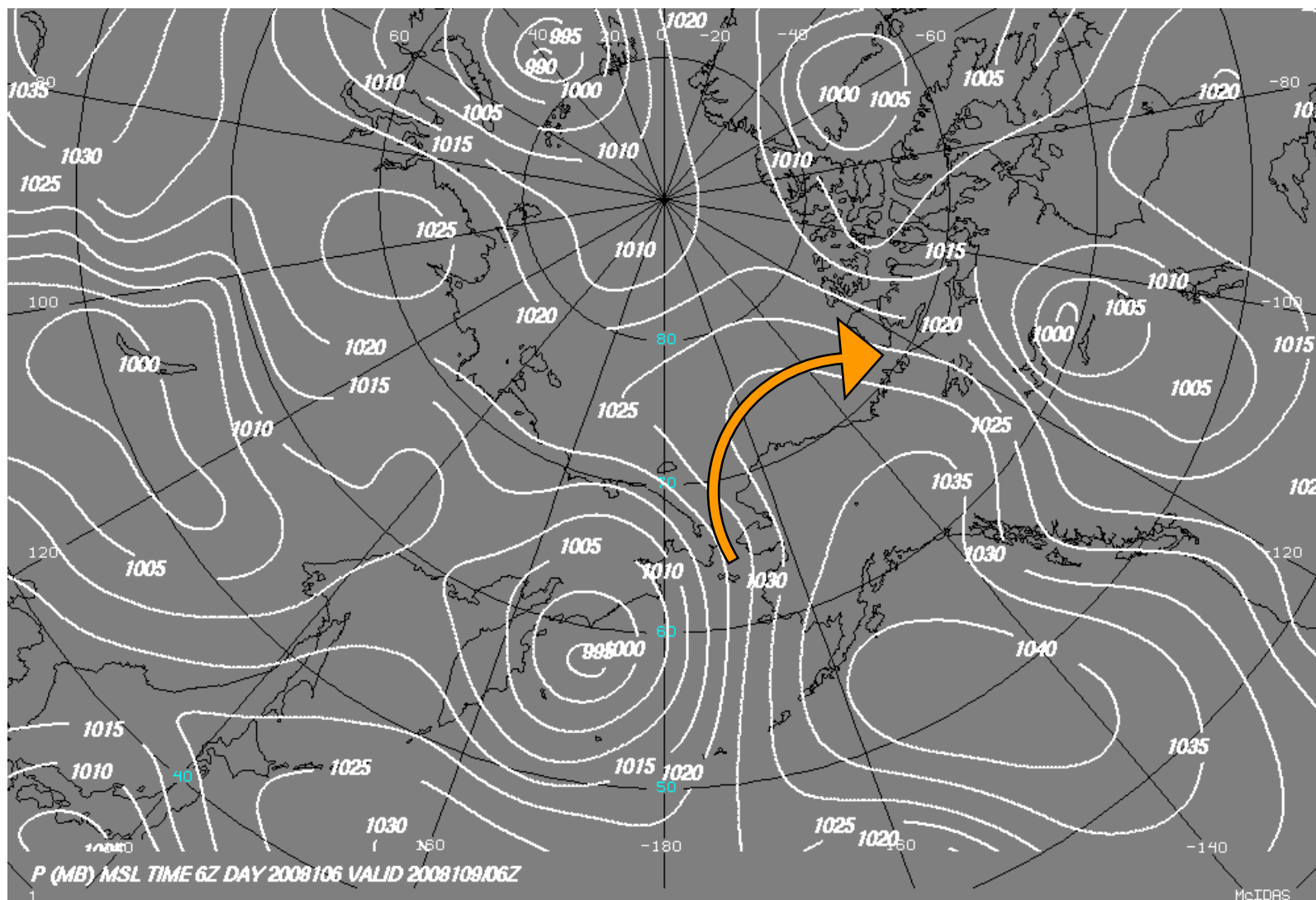
NAM MSLP, 10:00 AM local, Wednesday



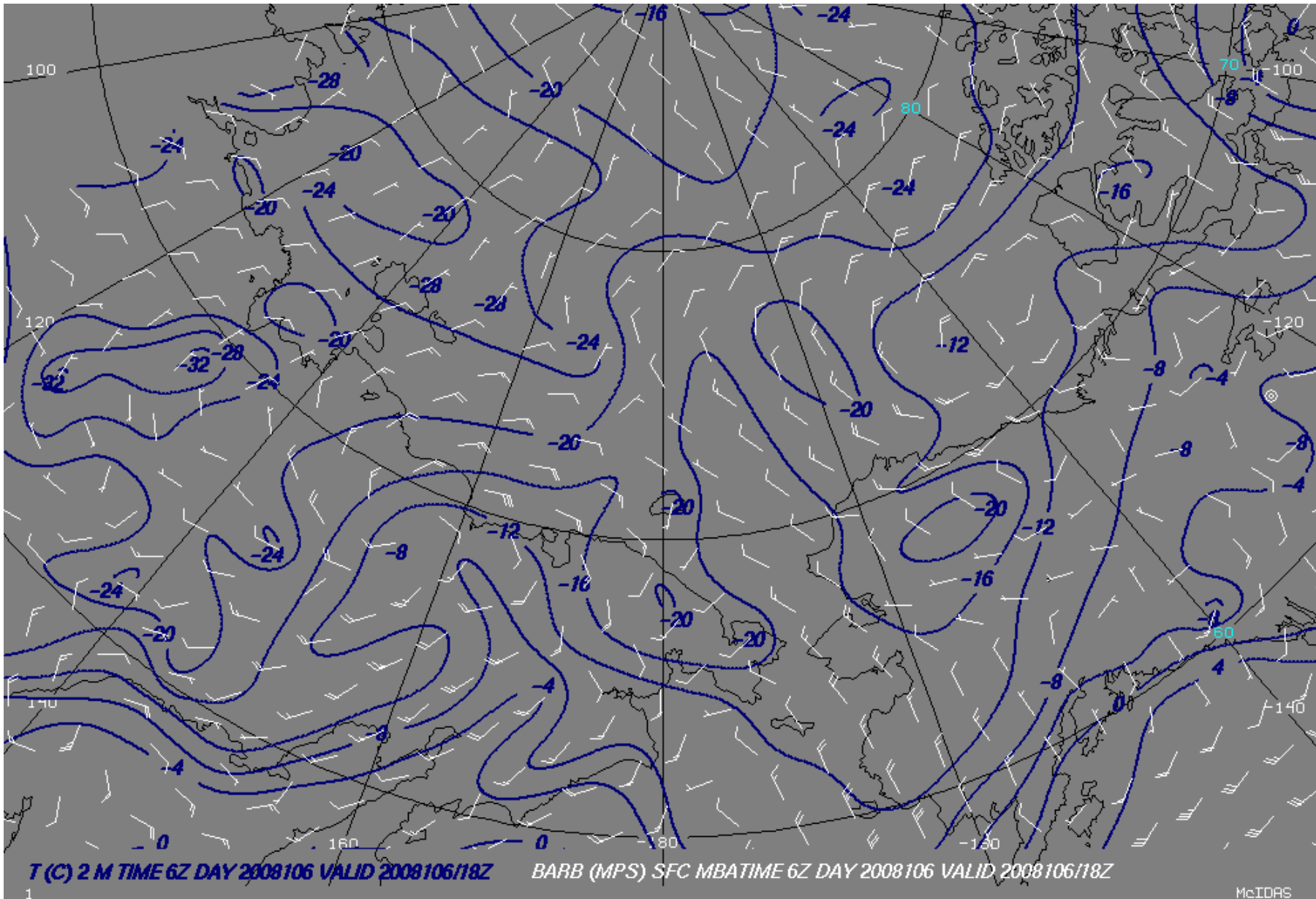
NAM MSLP, 10:00 AM local, Thursday



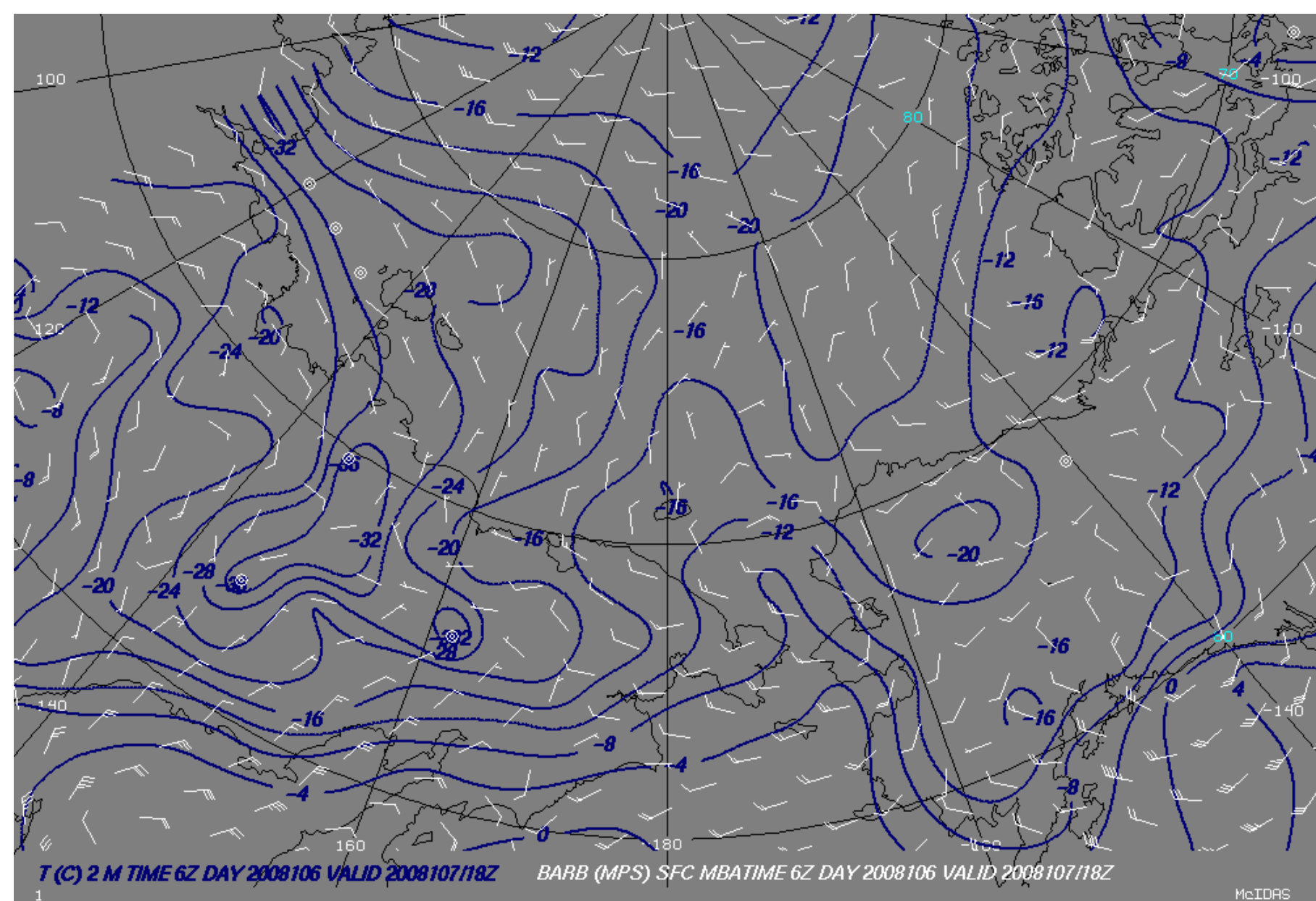
NAM MSLP, 10:00 AM local, Friday



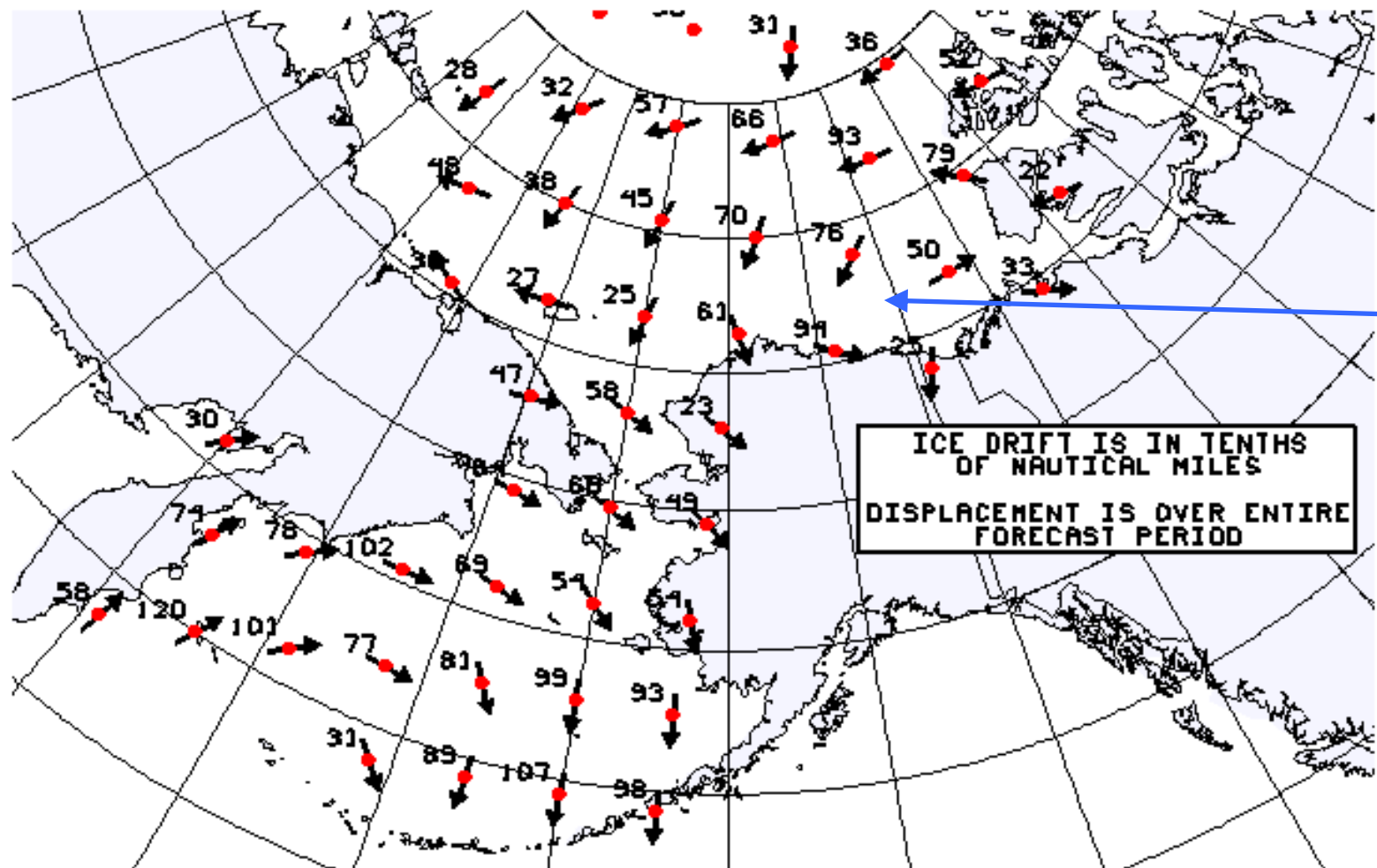
GFS MSLP, 10:00 PM local, Thursday



NAM surface winds from this morning



NAM surface winds for Wednesday 10:00 AM local

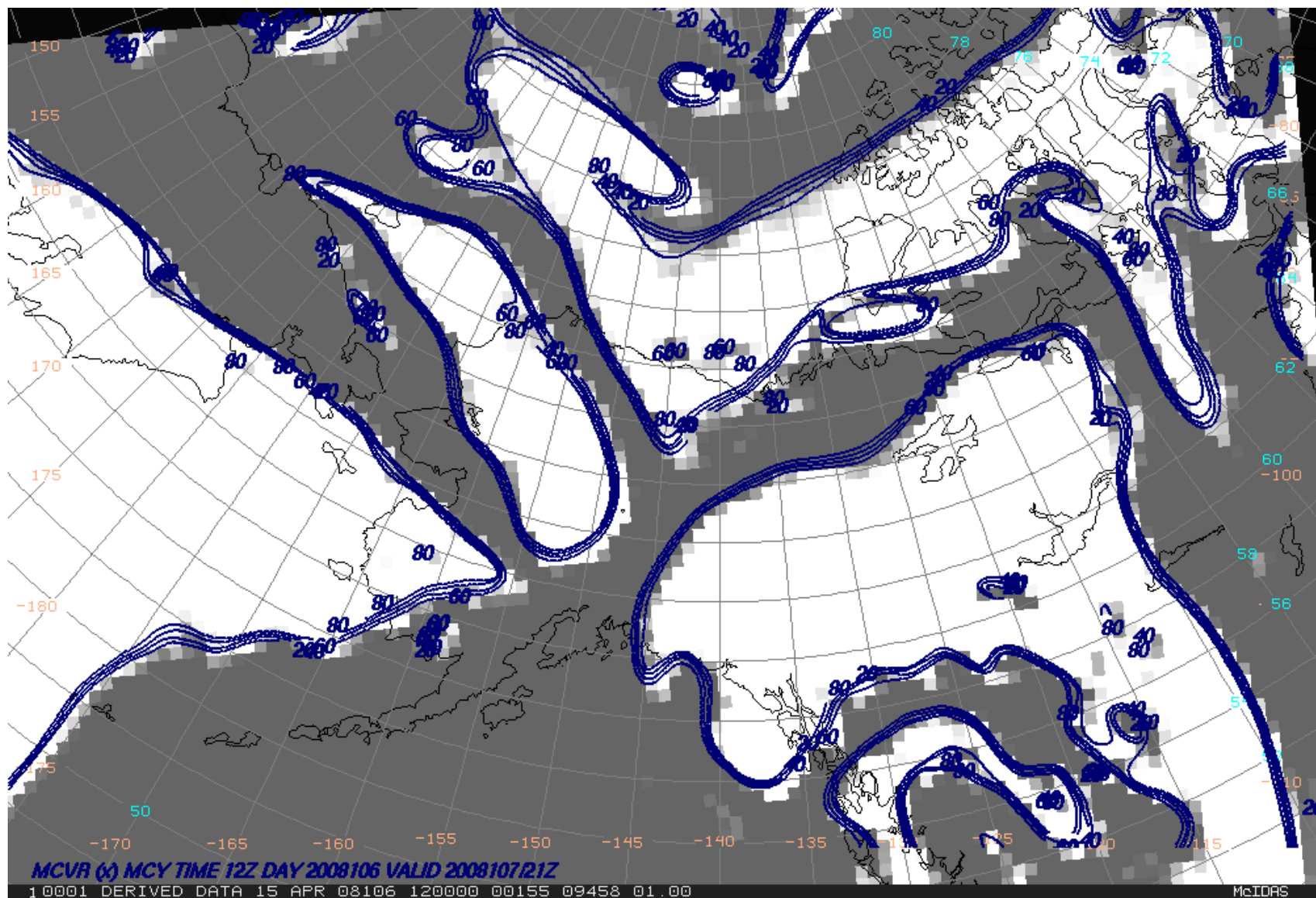


Region of
greatest
divergence?

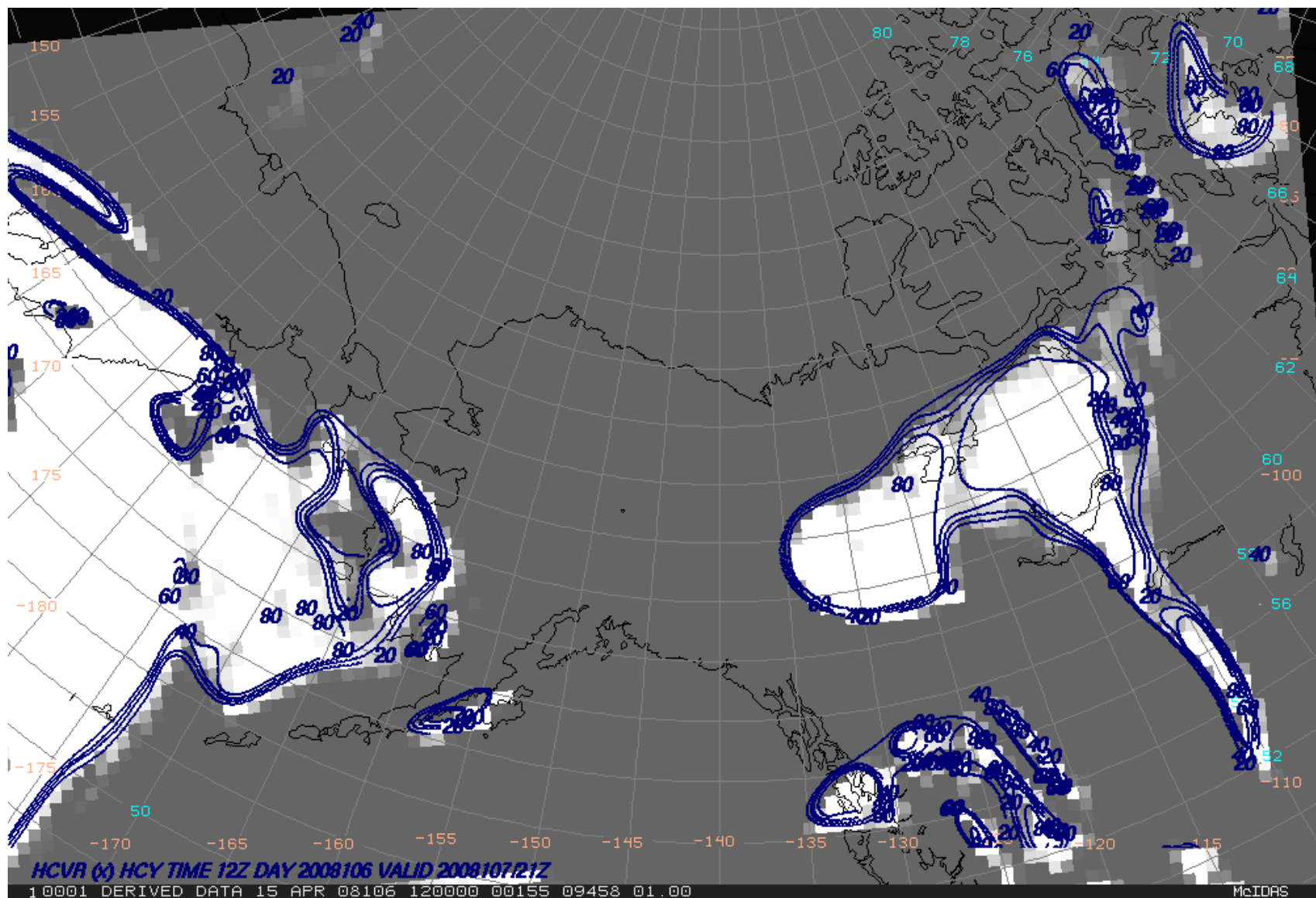
MMAB POLAR ICE DRIFT (10xNM) 048HR FCST VALID 2008/04/17 00UTC

NCEP Ice Drift Product

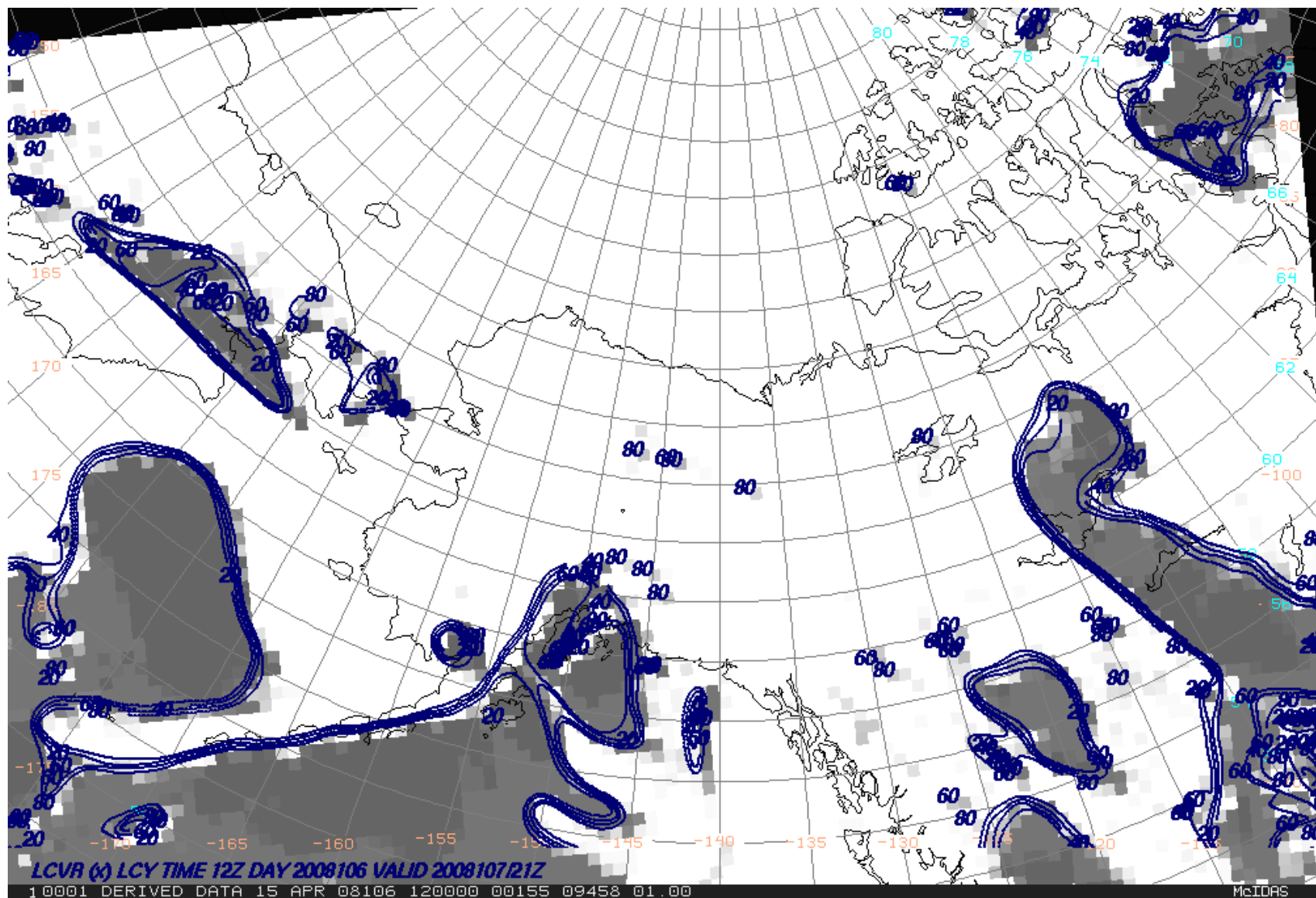
Distance traveled by the ice (tenths of a mile) between
4:00 PM (local) Monday and 4:00 PM (local) Wednesday



NAM mid-level cloud, 1:00 PM local time, Wednesday



NAM high-level cloud, 1:00 PM local time, Wednesday



NAM low-level cloud, 1:00 PM local time, Wednesday

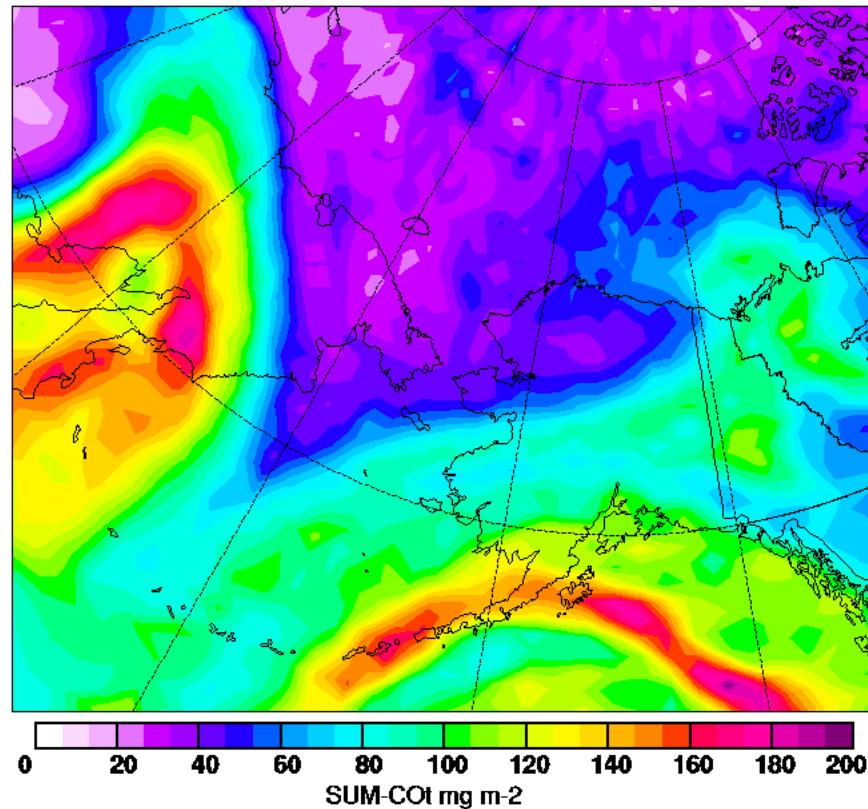
Total CO

Total column of species SUM-CO for age class 0 - 20.00 DAYS

Latest analysis time 20080415. 60000 Actual time 20080415. 0

Mean value 0.855E+02 Maximum value 0.555E+03 Minimum value 0.957E+01

Distance of grid lines 20.0 deg



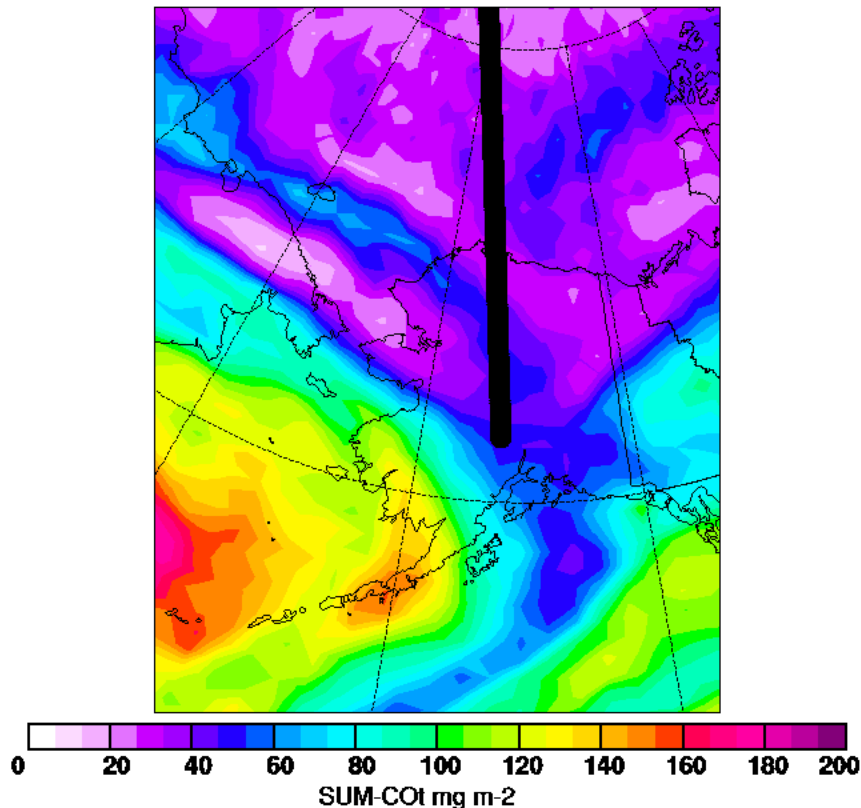
Anthropo CO₂, Wed. 10am, 12pm

Total column of species SUM-CO₂ for age class 0 - 20.00 DAYS

Latest analysis time 20080415. 60000 Actual time 20080416.180000

Mean value 0.867E+02 Maximum value 0.553E+03 Minimum value 0.110E+02

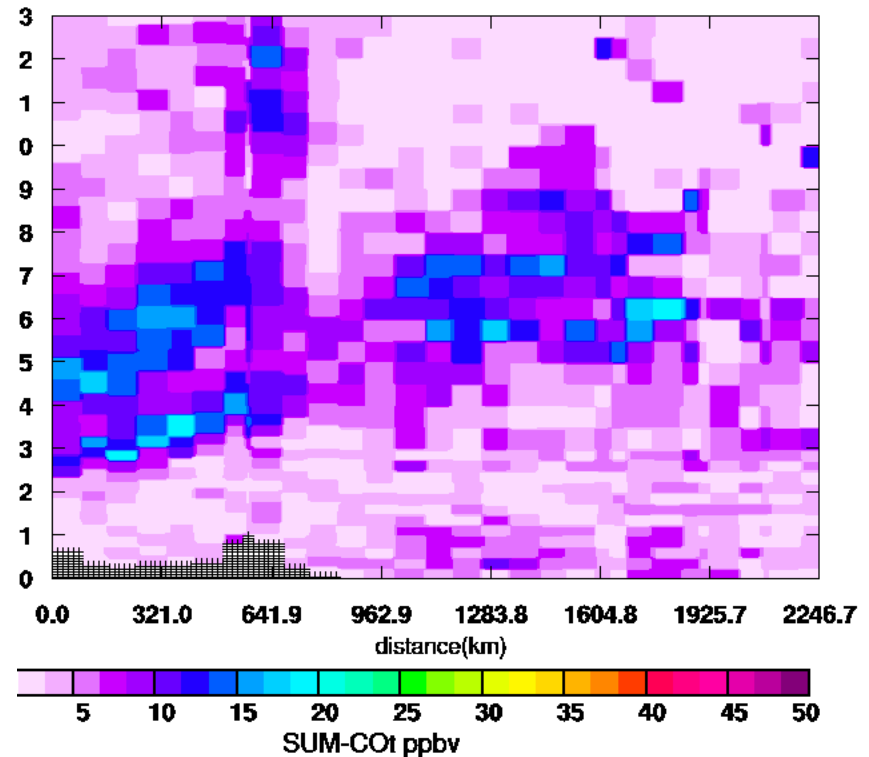
Distance of grid lines 20.0 deg



CROSS SECTION FROM 63 TO 83 LATITUDE AND -153 TO -164 LONGITUDE

NA-CO₂ MIXING RATIO FOR AGE CLASS 0 - 20.00 DAYS

LATEST ANALYSIS 20080415 60000 UTC ACTUAL TIME 20080416 18



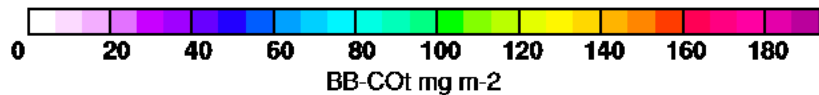
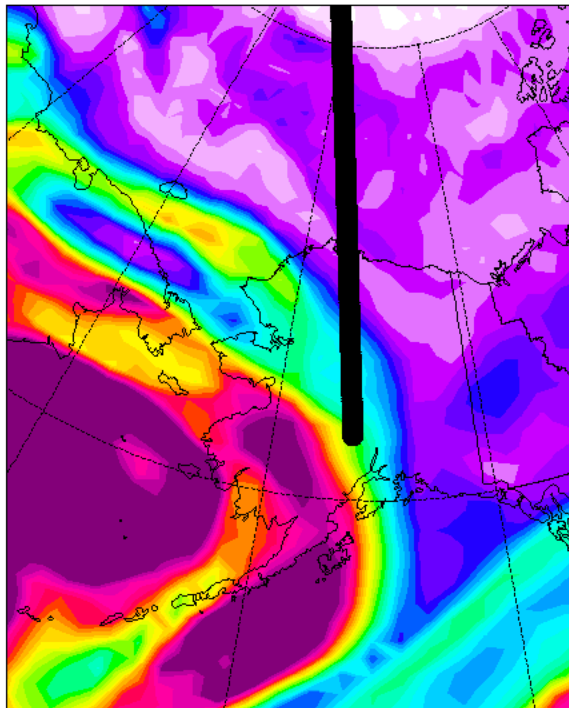
BB CO Wed.10am, 12pm

Total column of species BB-COt for age class 0 - 20.00 DAYS

Latest analysis time 20080415. 60000 Actual time 20080416.180000

Mean value 0.586E+02 Maximum value 0.870E+03 Minimum value 0.4

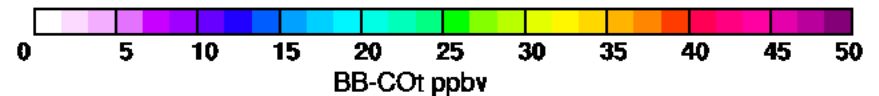
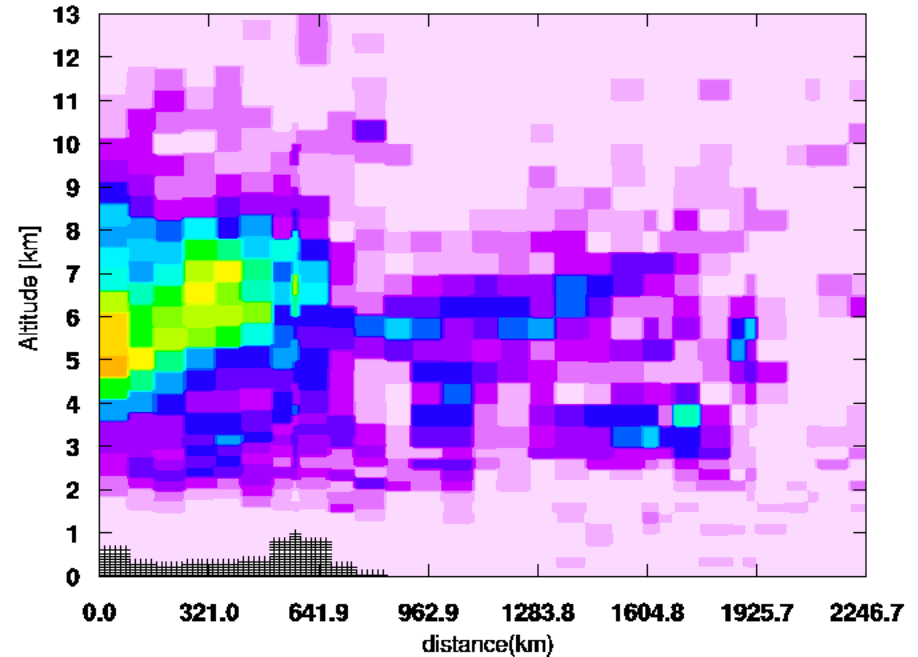
Distance of grid lines 20.0 deg



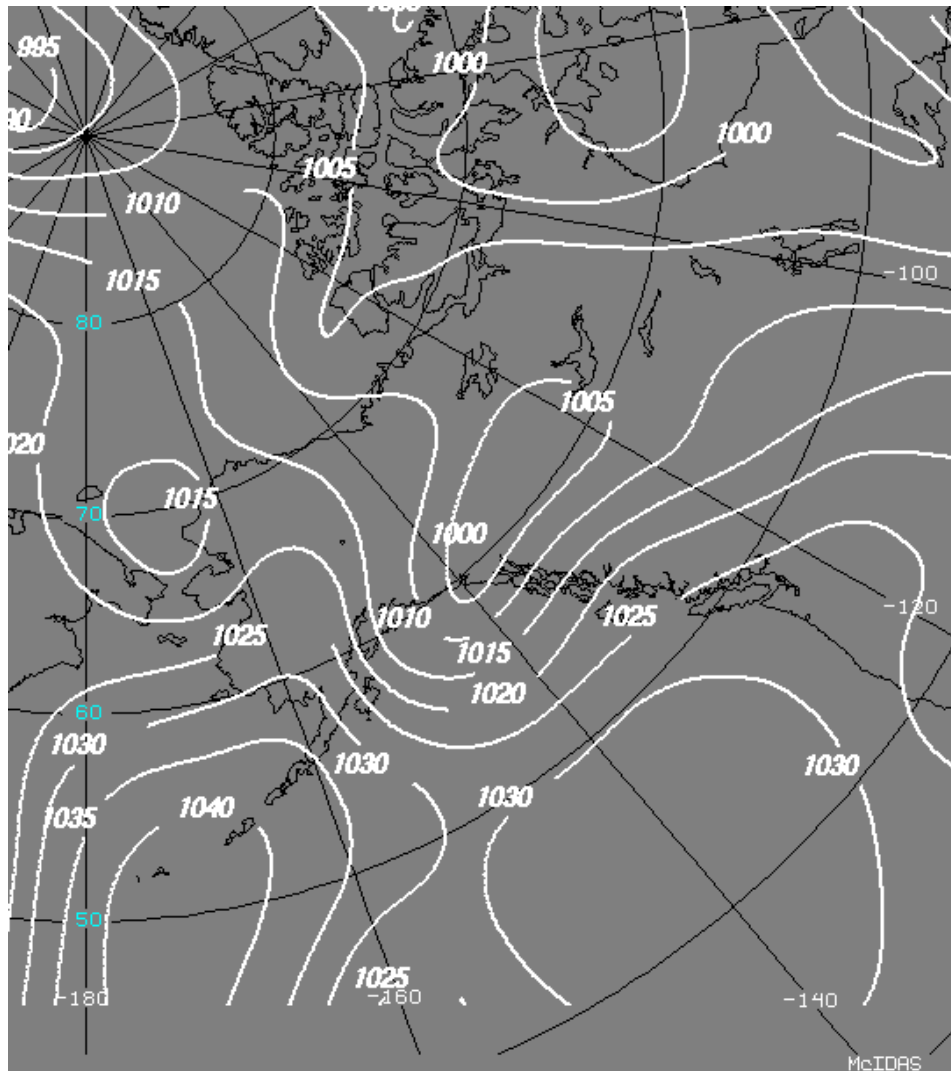
CROSS SECTION FROM 63 TO 83 LATITUDE AND -153 TO -164 LONGITUDE

BB-COt MIXING RATIO FOR AGE CLASS 0 - 20.00 DAYS

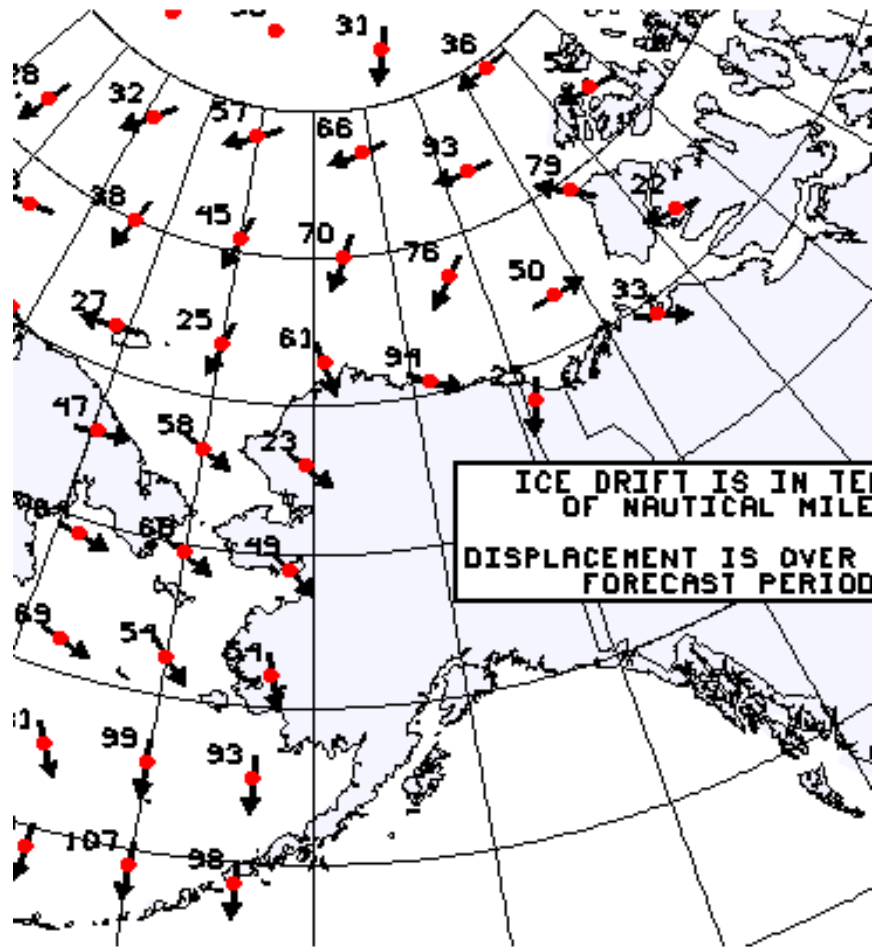
LATEST ANALYSIS 20080415 60000 UTC ACTUAL TIME 20080416 18



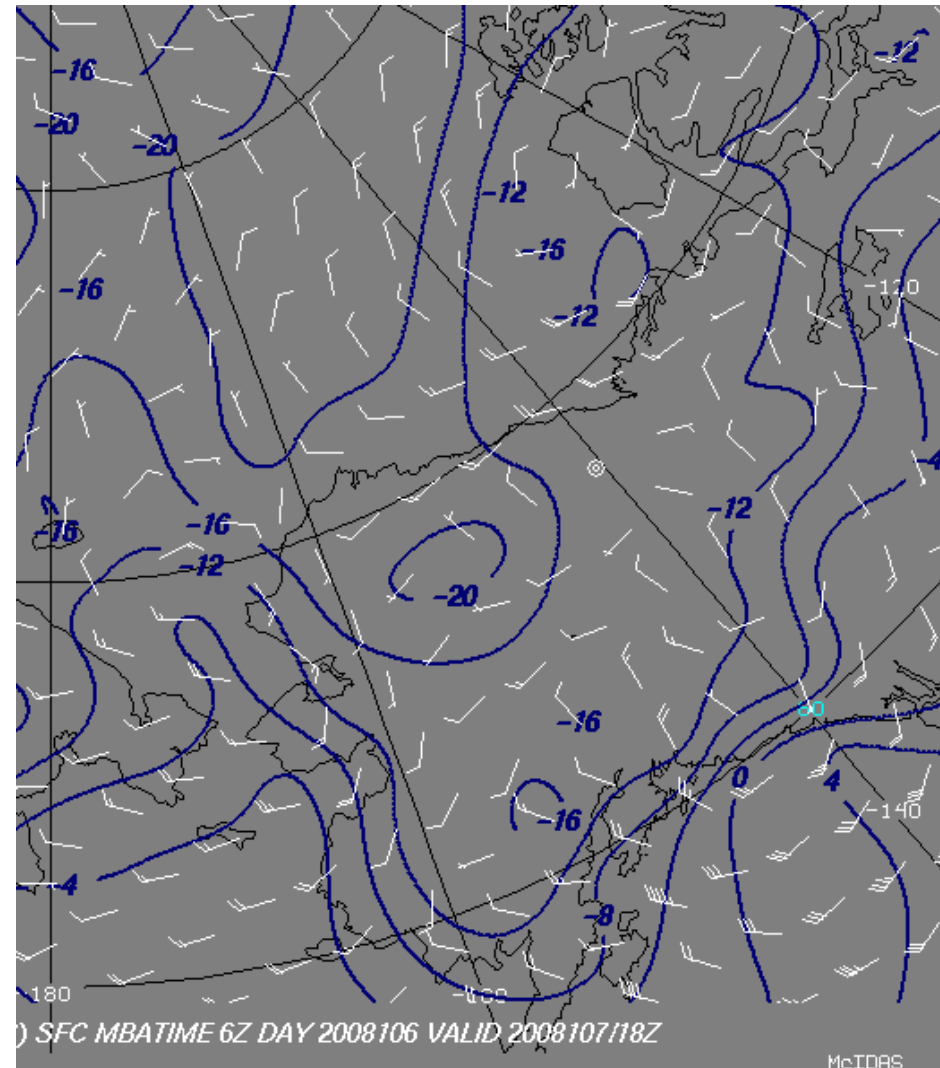
Wed., 10am, Surf pressure



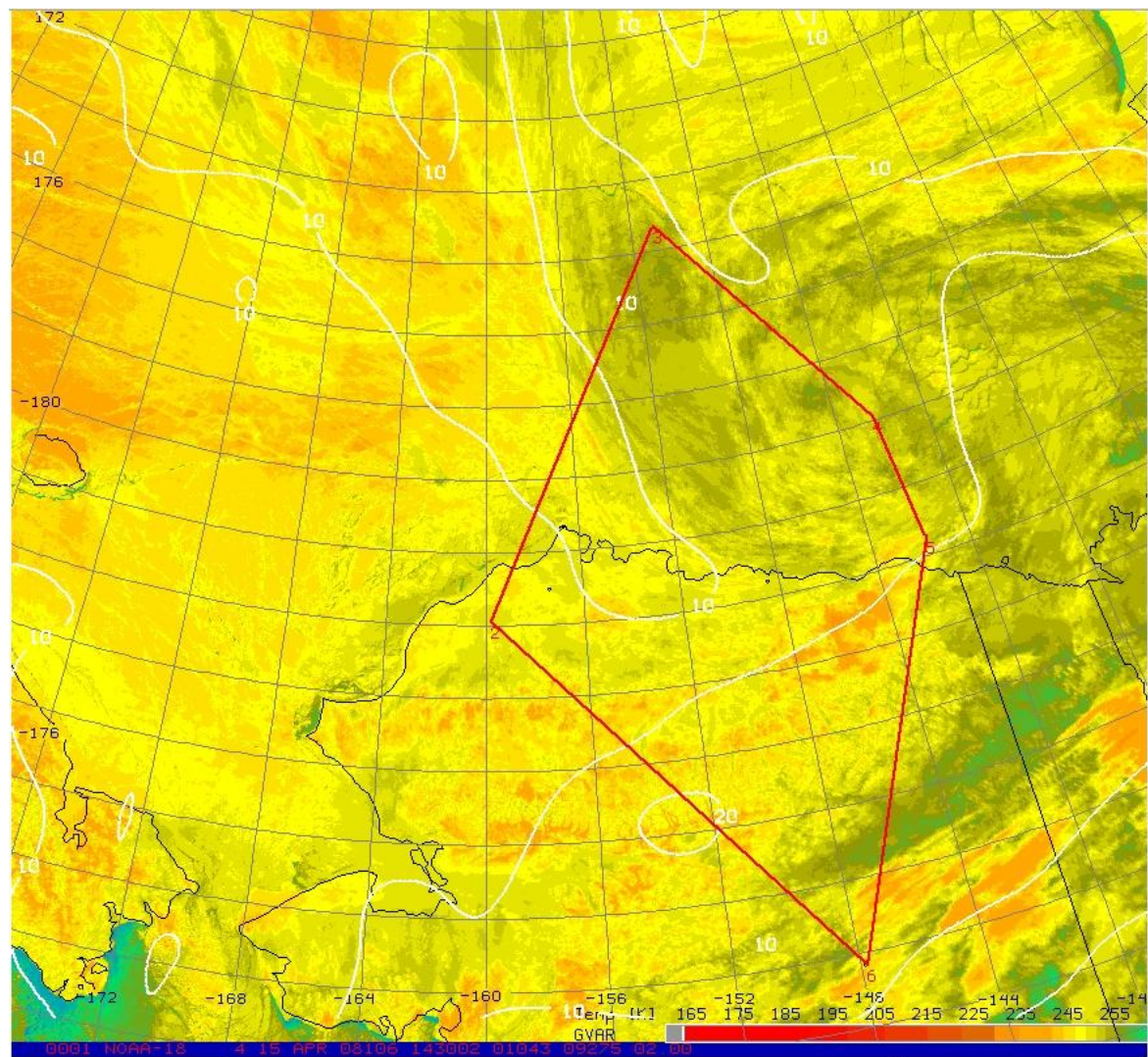
Wed.:ice drift 4pm, surface
temp.+wind,10am



[FT (10xNM) 048HR FCST VALID 2008/04/17 00UT]

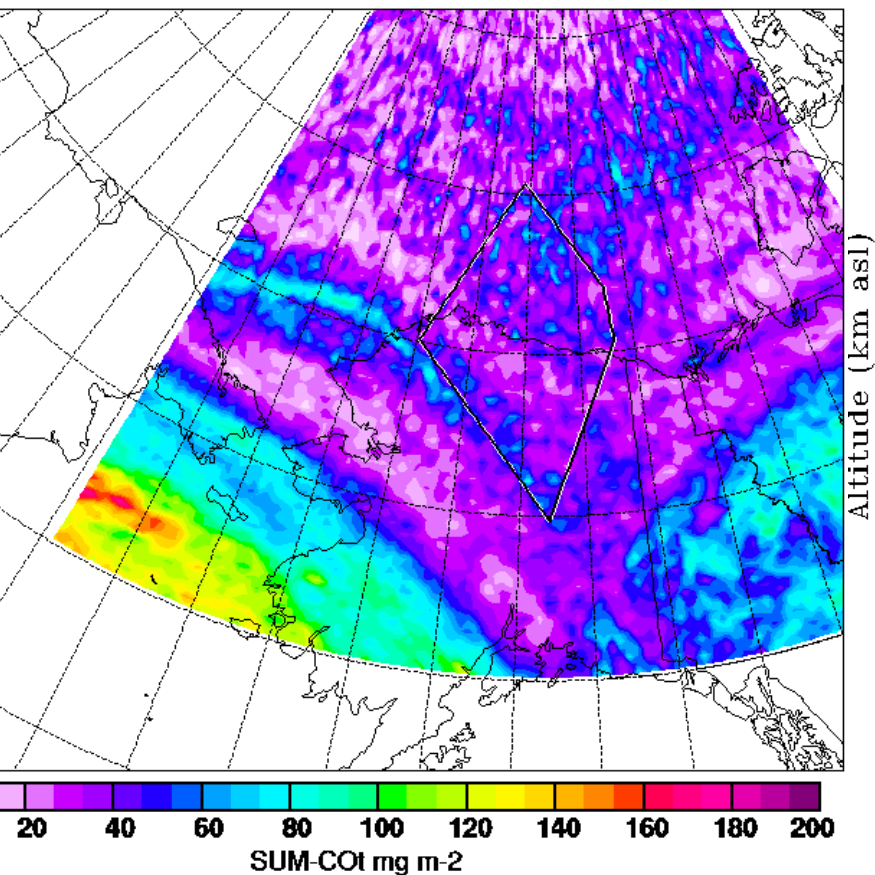


McIDAS



Anthropo CO.

Mean of species SUM-CO for age class 0 - 20.00 DAYS
Analysis time 20080415. 60000 Actual time 20080417. 0
e 0.454E+02 Maximum value 0.173E+03 Minimum value 0.260E-
Distance of grid lines 5.0 deg

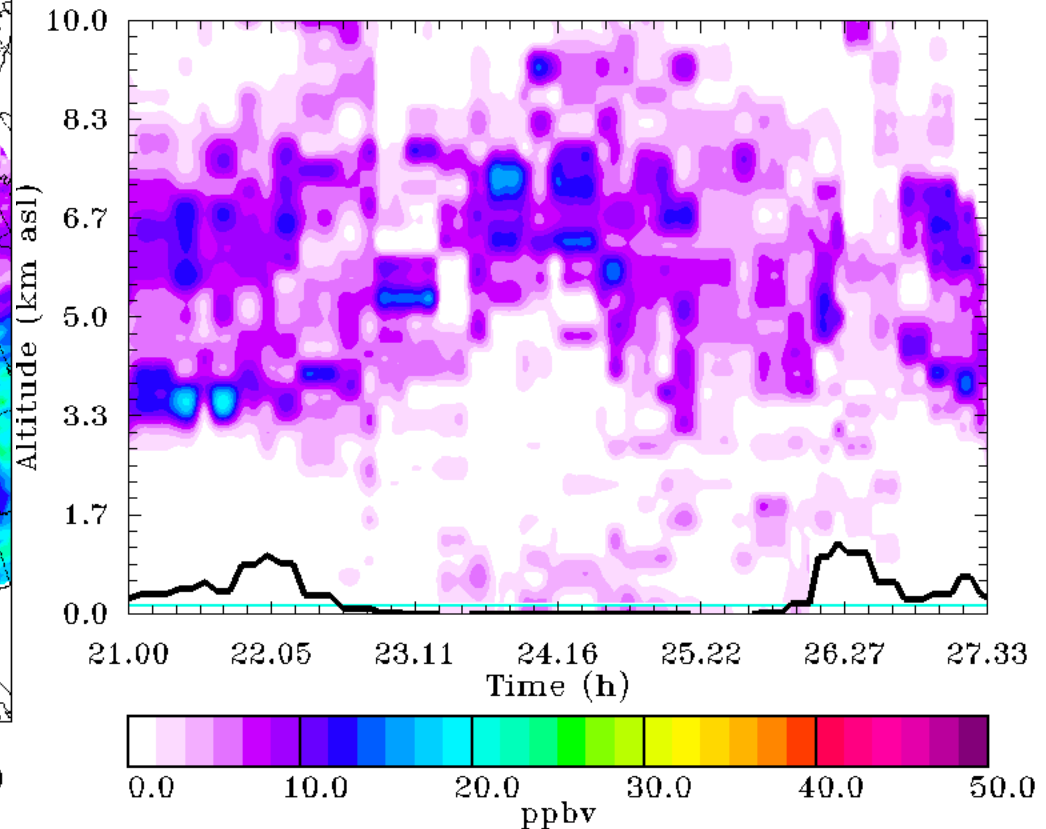


Tracer profile

Date: 20080415 90000

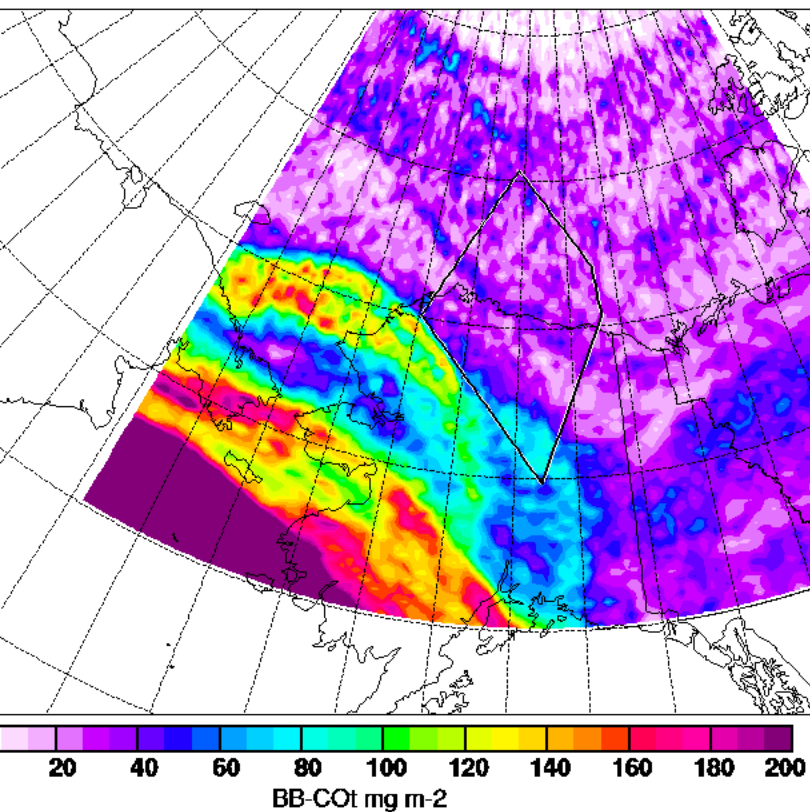
Start: + 0 d 21 h End: + 1 d 3 h

Mean value: 5.145
Maximum value: 17.296
Minimum value: 0.003



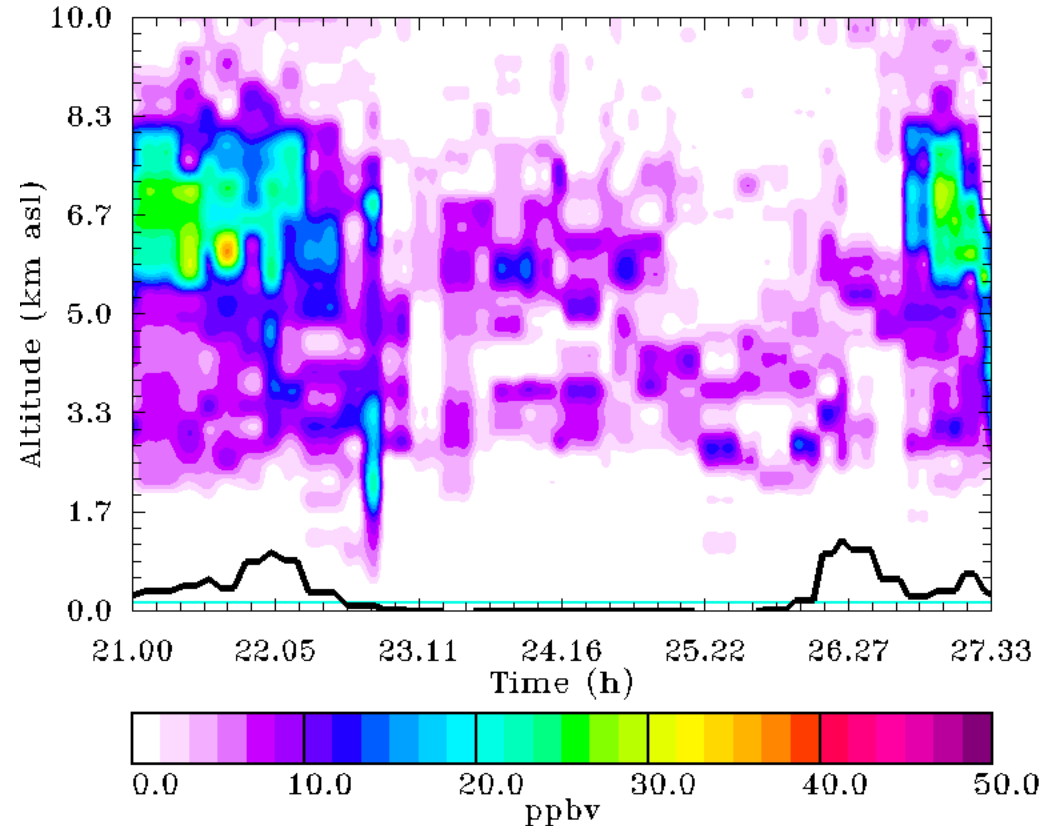
BB CO

Column of species BB-CO_t for age class 0 - 20.00 DAYS
Start analysis time 20080415. 60000 Actual time 20080417. 0
Mean value 0.470E+02 Maximum value 0.354E+03 Minimum value 0.000E+00
Distance of grid lines 5.0 deg

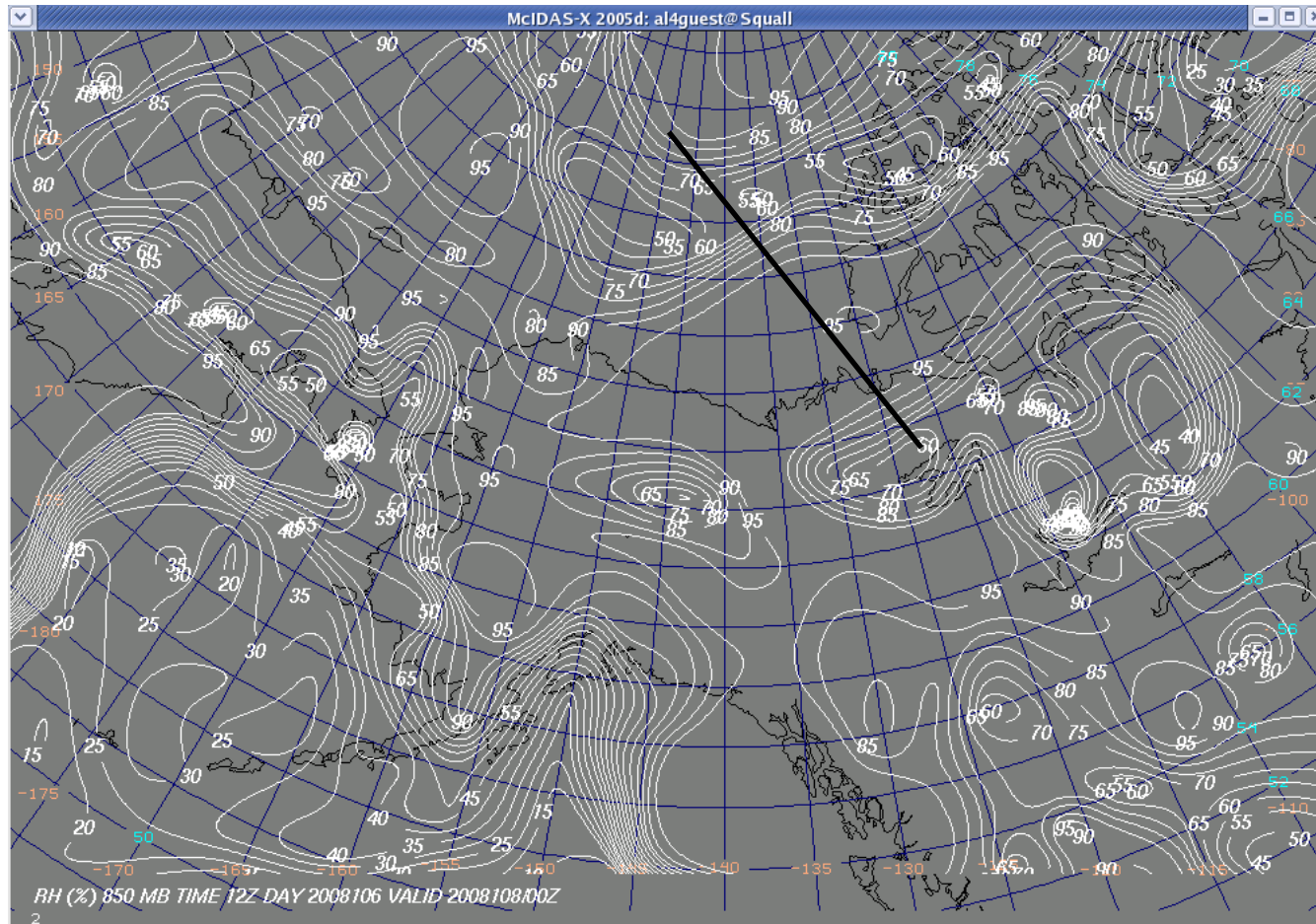


Tracer profile

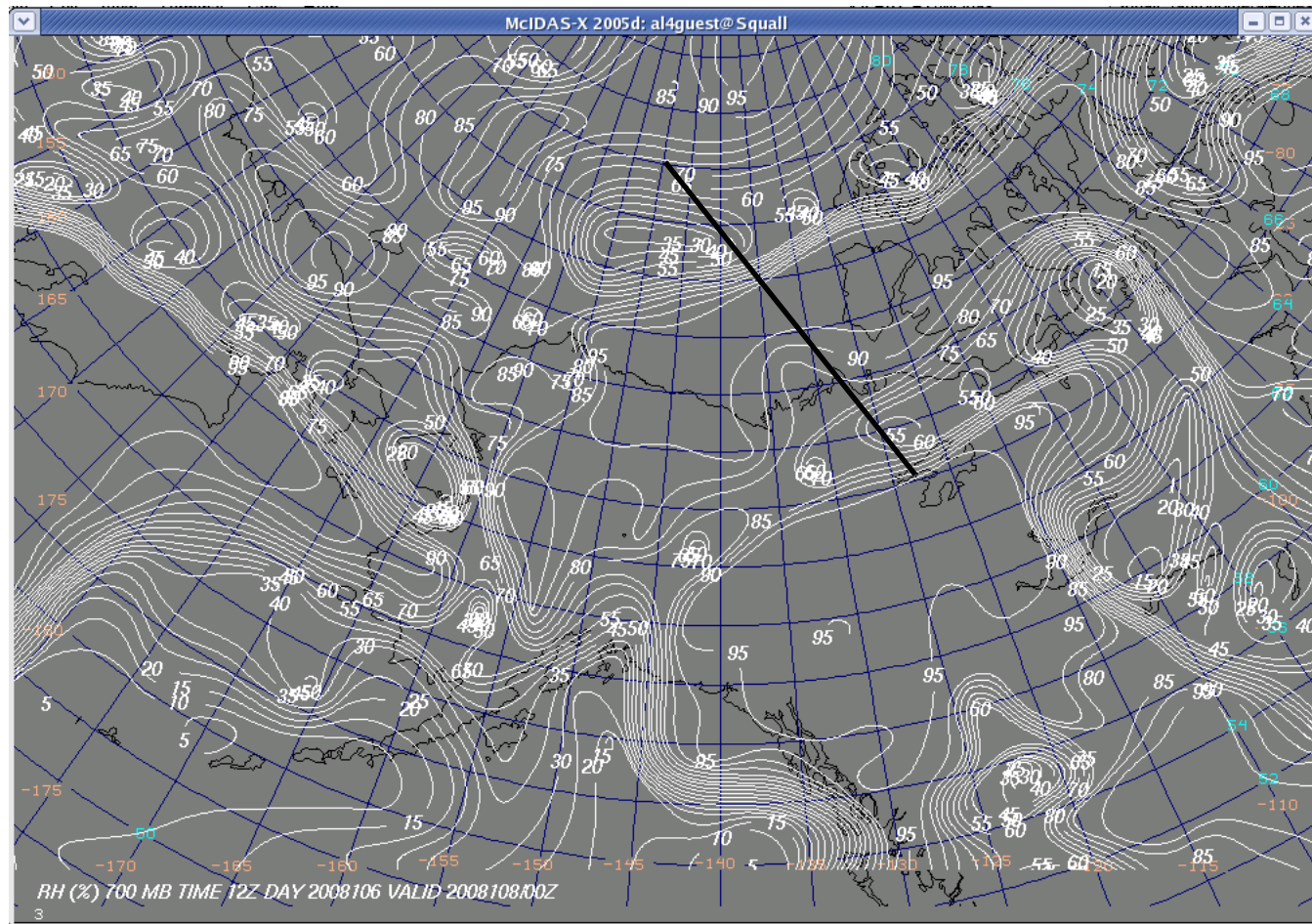
Date: 20080415 90000
Start: + 0 d 21 h End: + 1 d 3 h
Mean value: 6.088
Maximum value: 32.328
Minimum value: 0.000



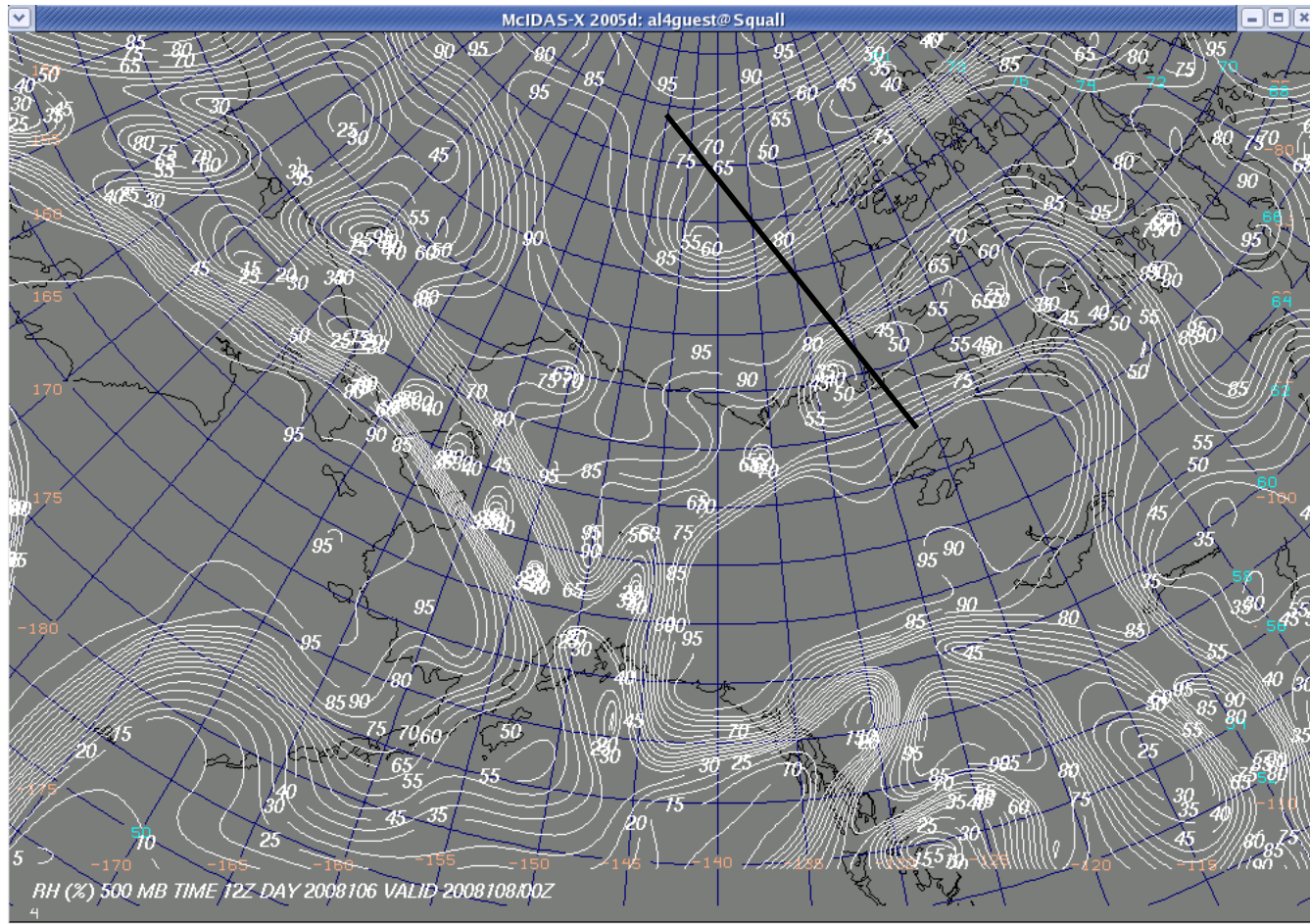
850hPa, RH from GFS, 4pm

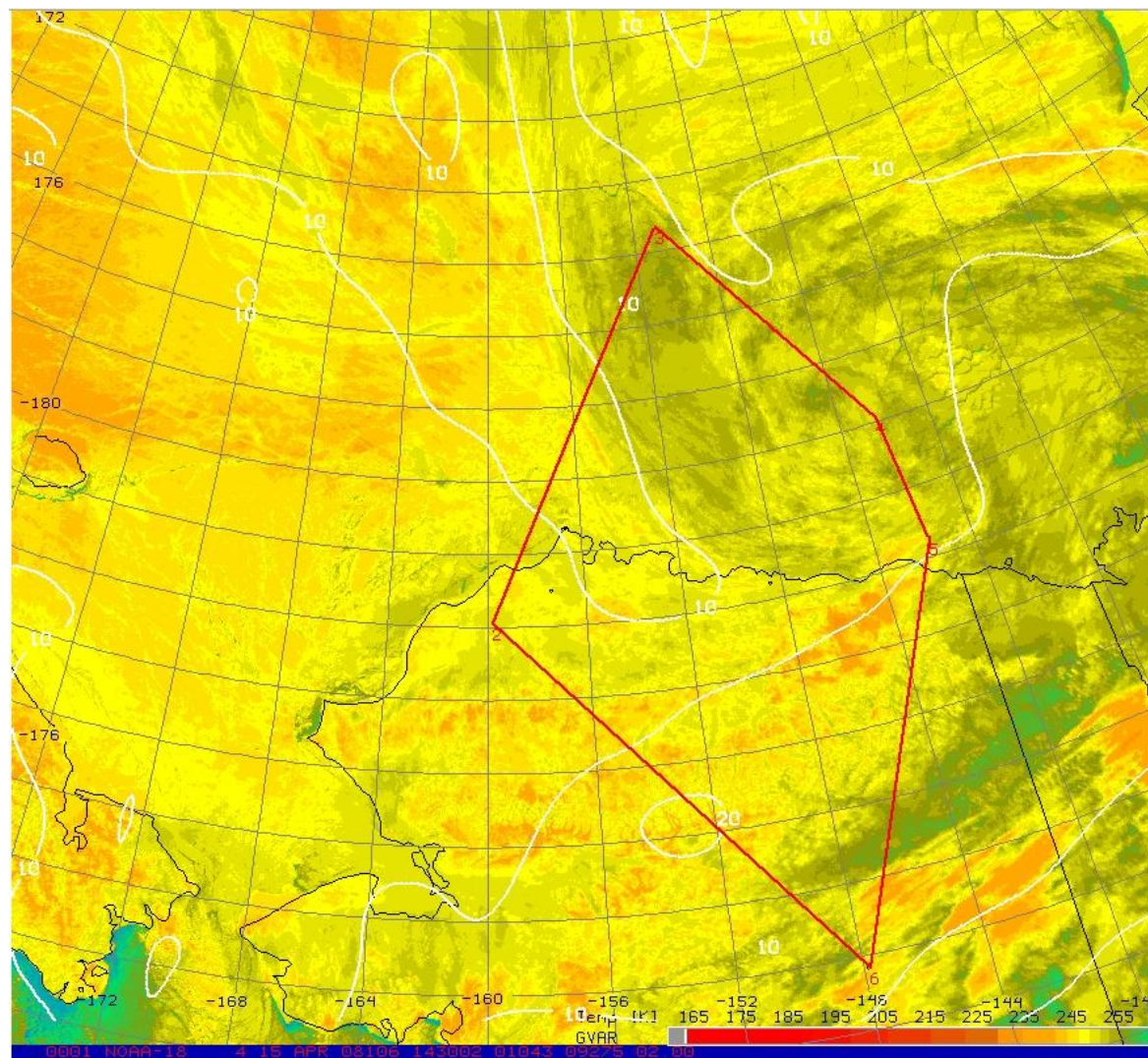


700hPa, RH from GFS, 4pm



500hPa, RH from GFS, 4pm

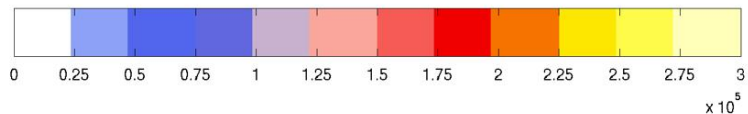
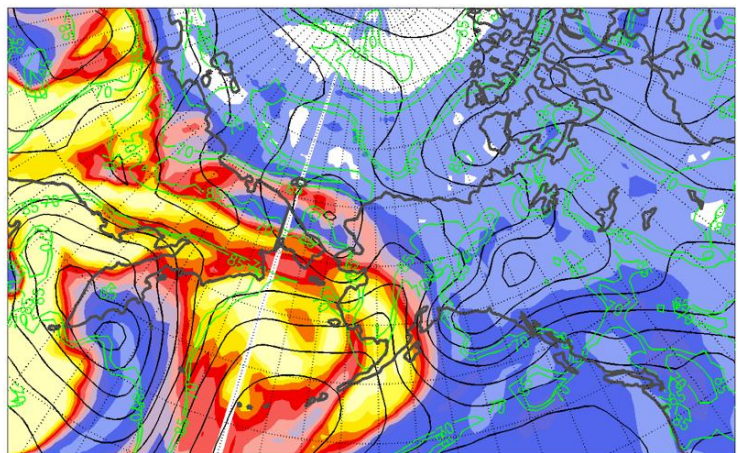




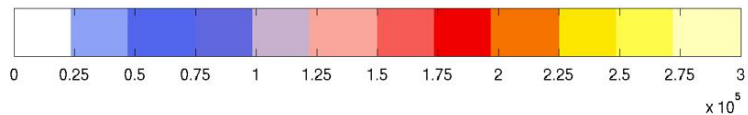
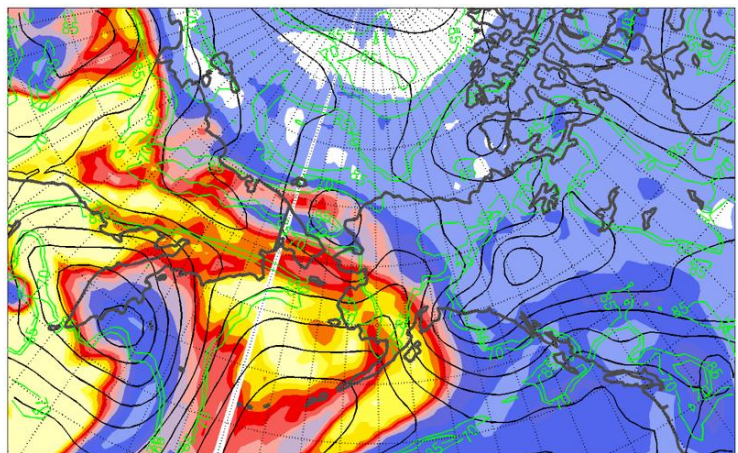
biomass burning CO

black carbon

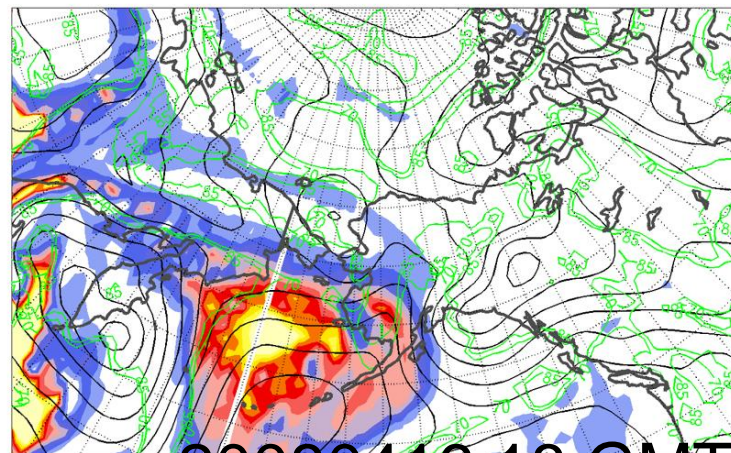
BB-CO on 18 UTC 2008-04-16 at level Total column



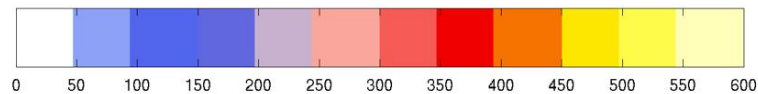
BB-CO on 21 UTC 2008-04-16 at level Total column



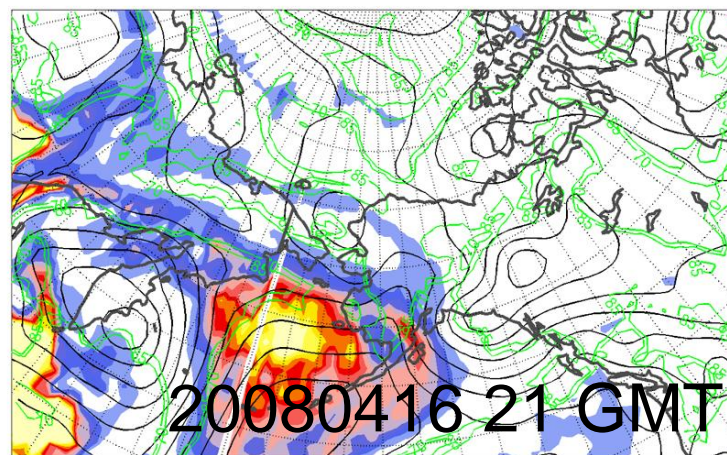
BB-BC on 18 UTC 2008-04-16 at level Total column



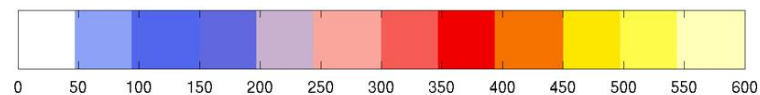
20080416 18 GMT



BB-BC on 21 UTC 2008-04-16 at level Total column



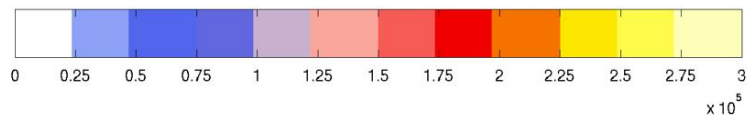
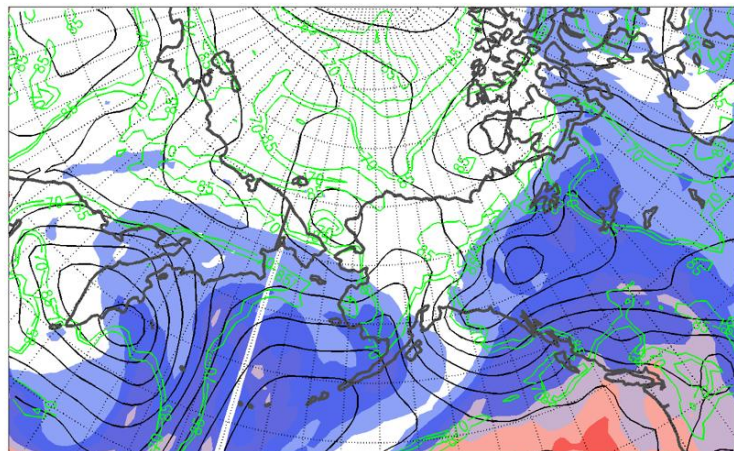
20080416 21 GMT



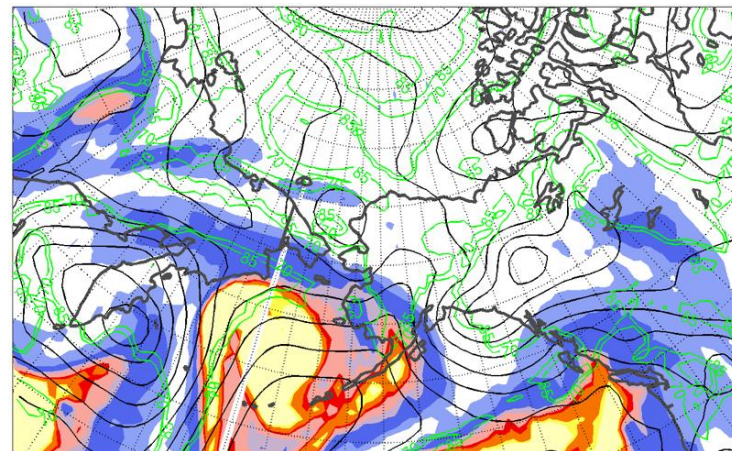
Asian CO

SO4

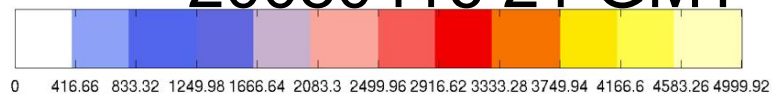
AS-CO on 21 UTC 2008-04-16 at level Total column



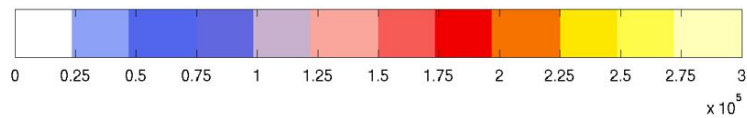
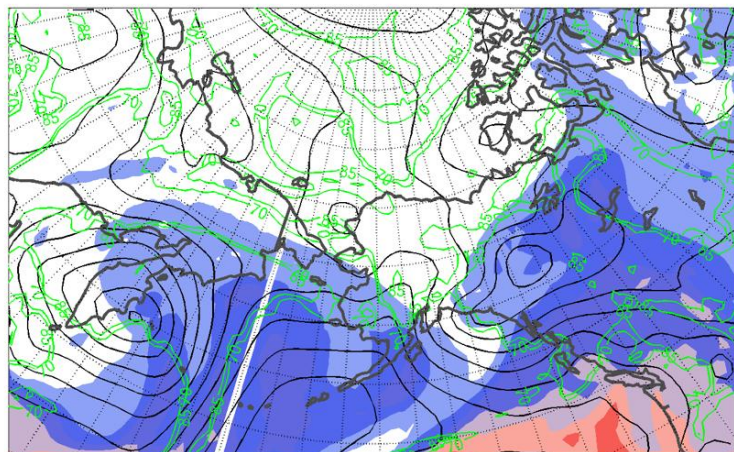
AS-SO4 on 21 UTC 2008-04-16 at level Total column



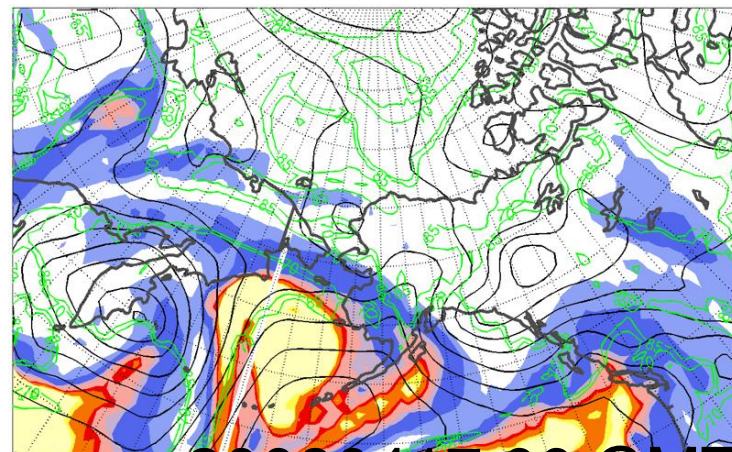
20080416 21 GMT



AS-CO on 00 UTC 2008-04-17 at level Total column



AS-SO4 on 00 UTC 2008-04-17 at level Total column

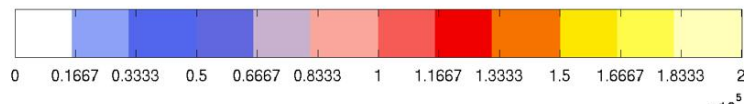
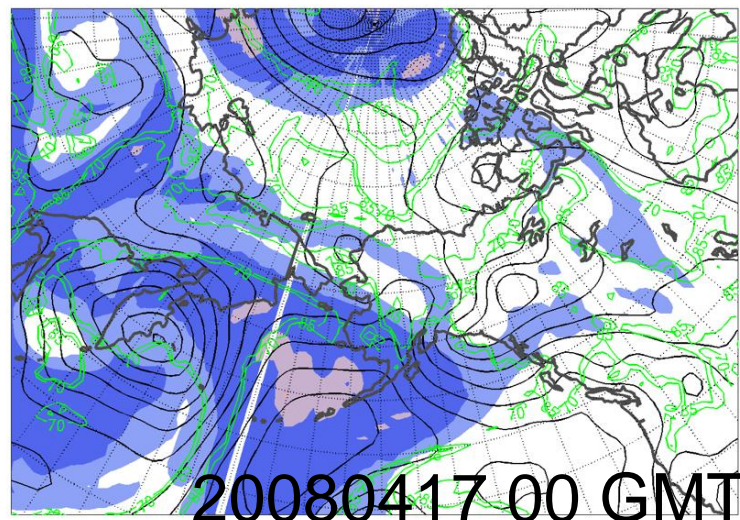


20080417 00 GMT

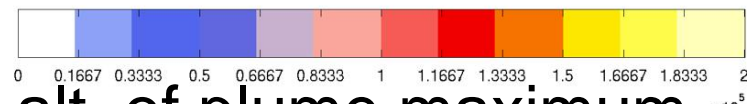
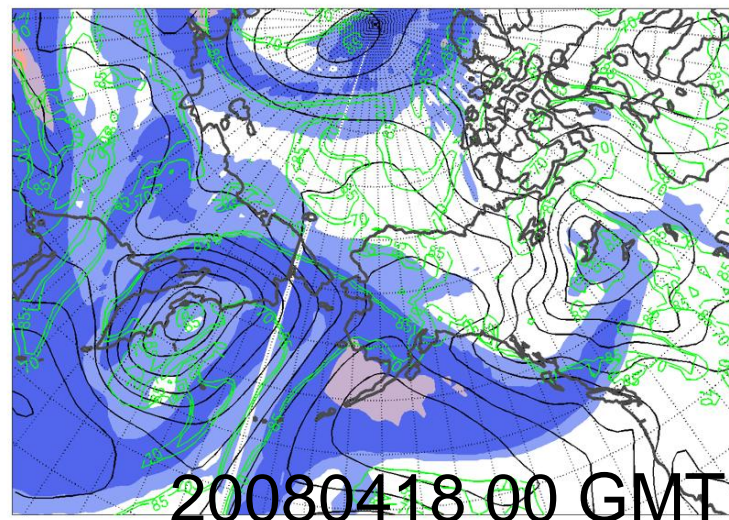


EU CO

EU-CO on 00 UTC 2008-04-17 at level Total column

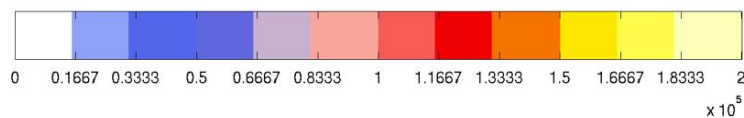
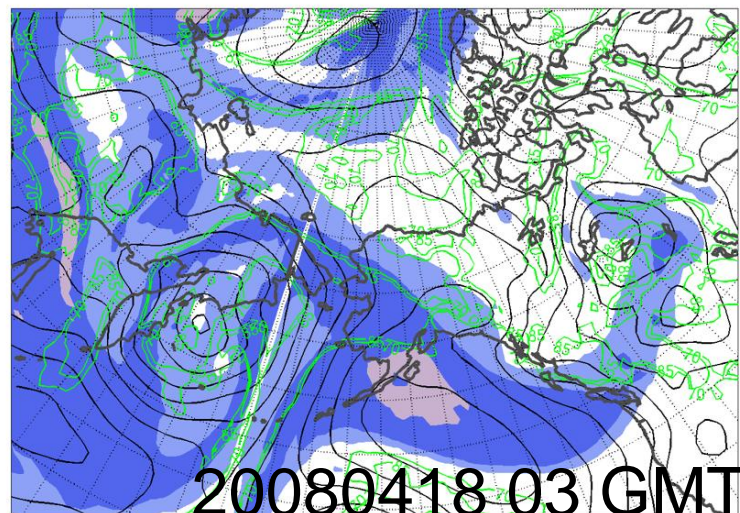


EU-CO on 18 UTC 2008-04-17 at level Total column

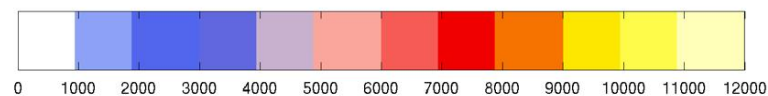
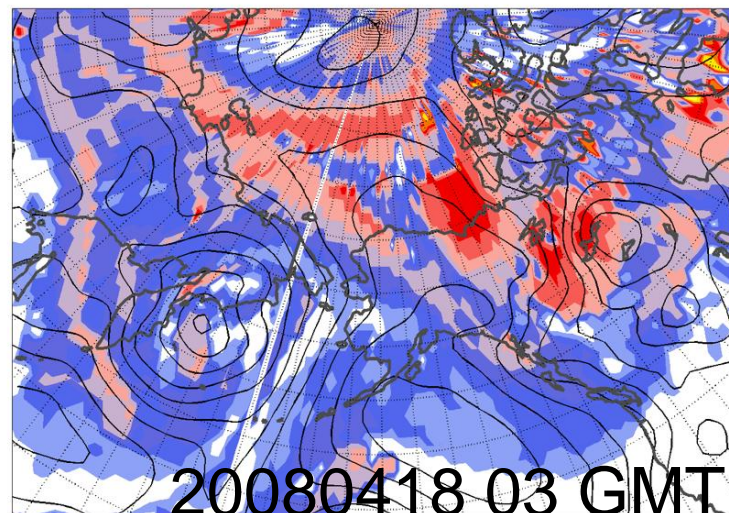


alt. of plume maximum $\times 10^5$

EU-CO on 03 UTC 2008-04-18 at level Total column



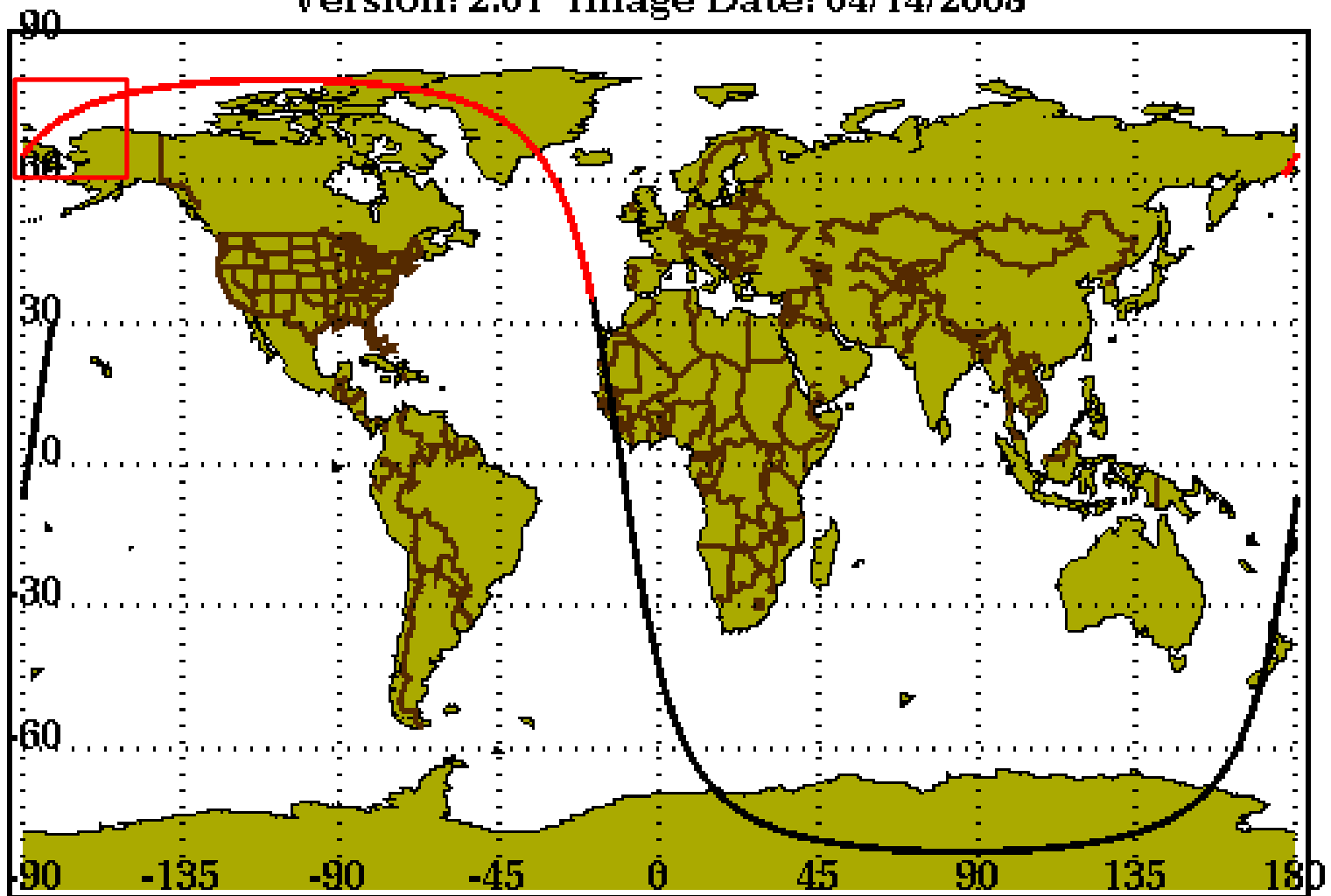
EU-CO on 03 UTC 2008-04-18, altitude of tracer maximum



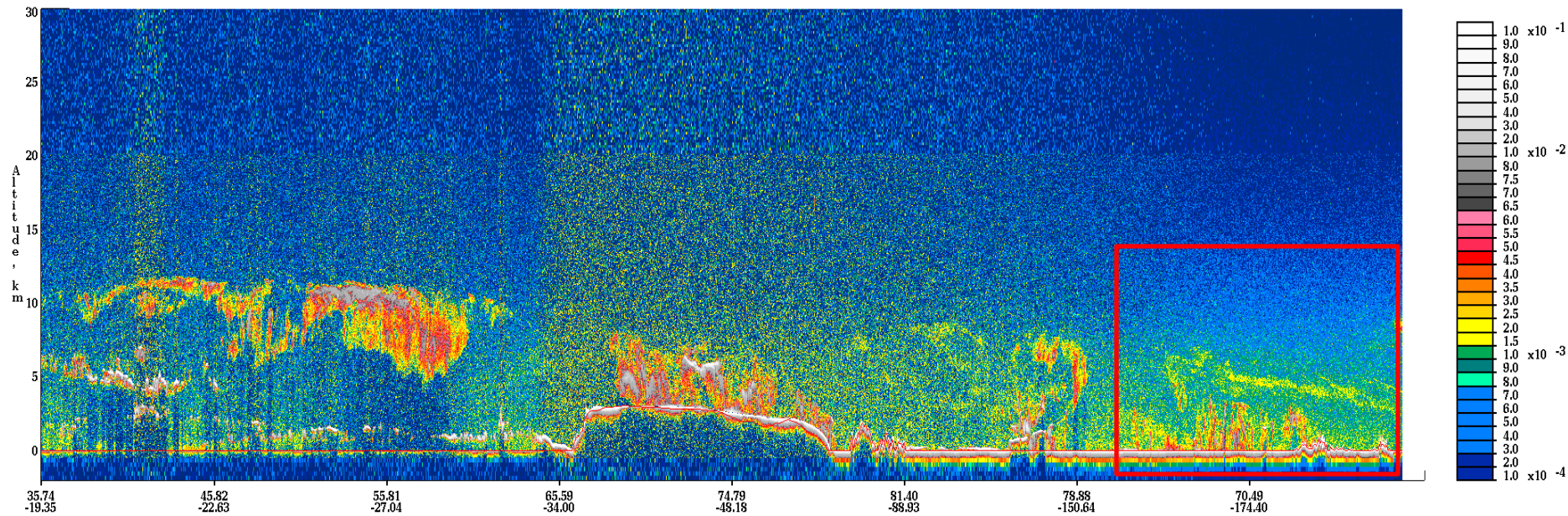
RAQMS Fairbanks Local FX Discussion:

**00Z 04/17-04/19
Initialized 12Z 04/14**

2008-04-13 13-30-00 UTC Half of Hour Conditions
Version: 2.01 Image Date: 04/14/2008

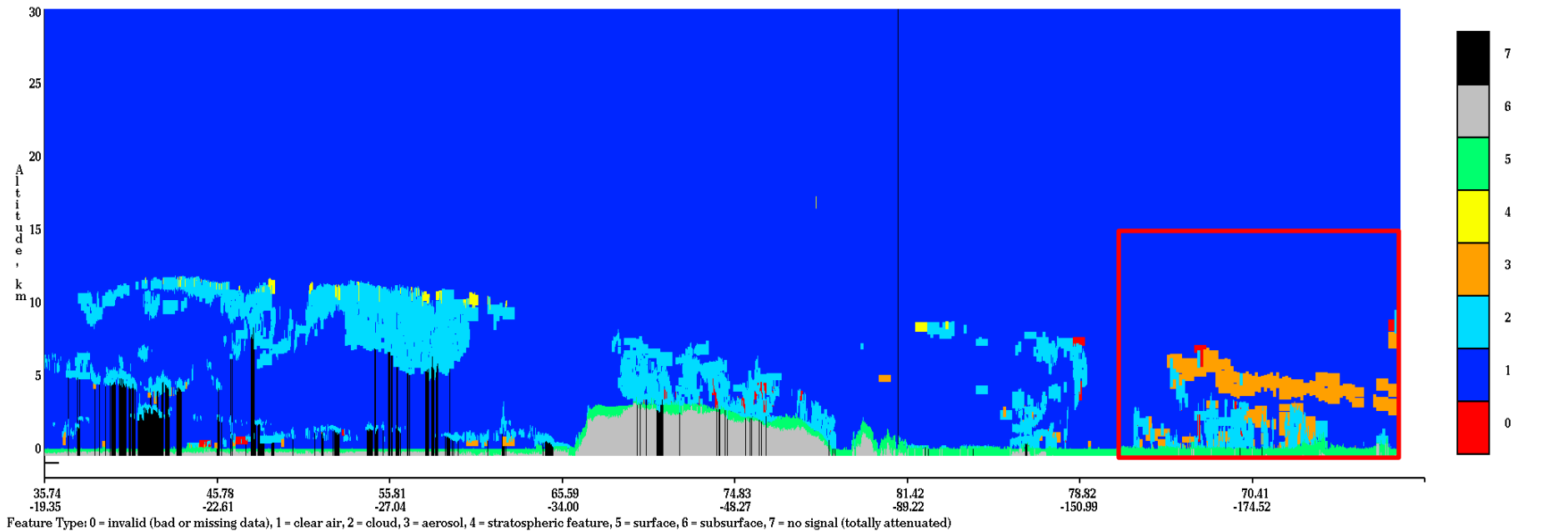


Version: 2.01 Image Date: 04/14/2008

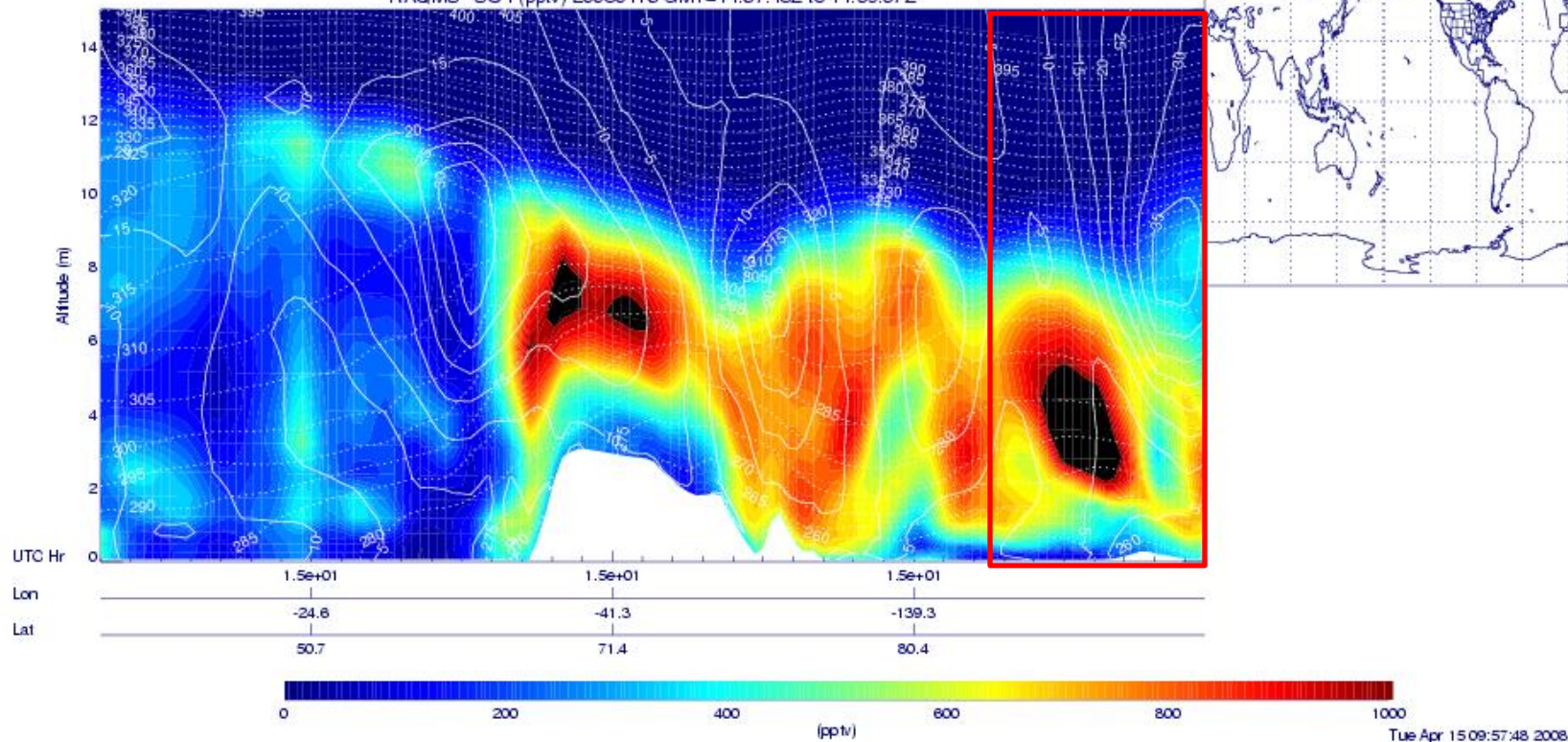


Vertical Feature Mask Begin UTC: 2008-04-13 14:37:48.2801 End UTC: 2008-04-13 14:59:57.7212

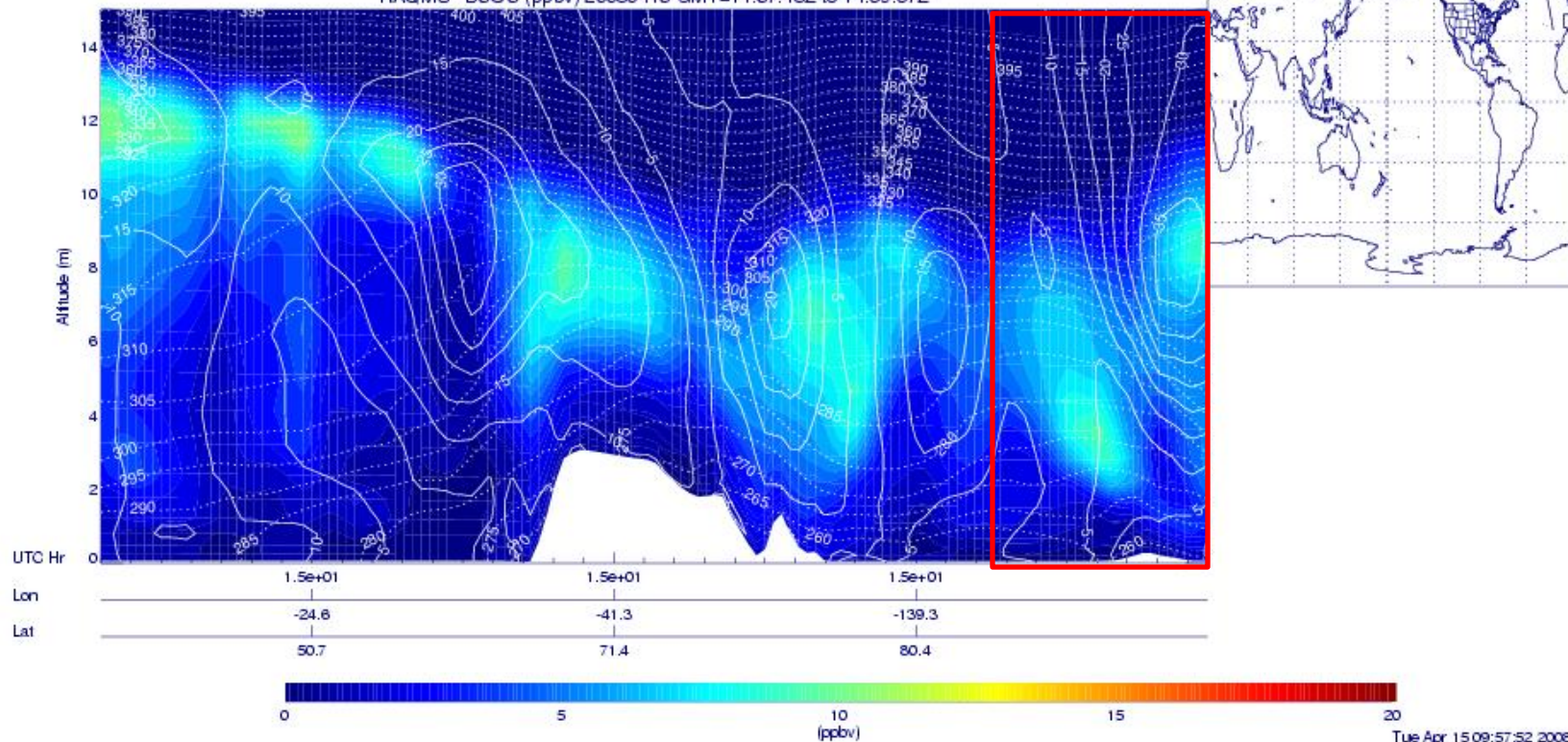
Version: 2.01 Image Date: 04/14/2008



RAQMS 'SO4 (pptv) 20080413 GMT=14:37:48Z to 14:59:57Z

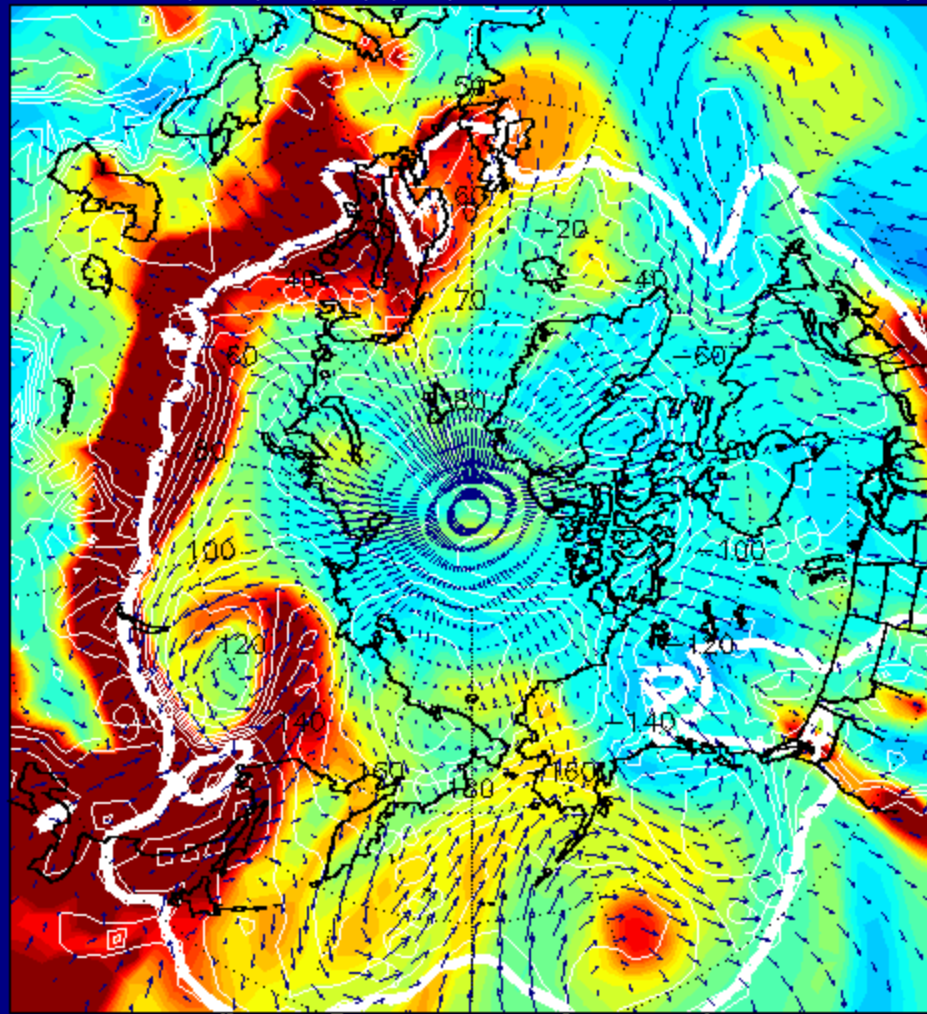


RAQMS ' BCOC (ppbv) 20080413 GMT=14:37:48Z to 14:59:57Z



280K CO 12Z 20080413

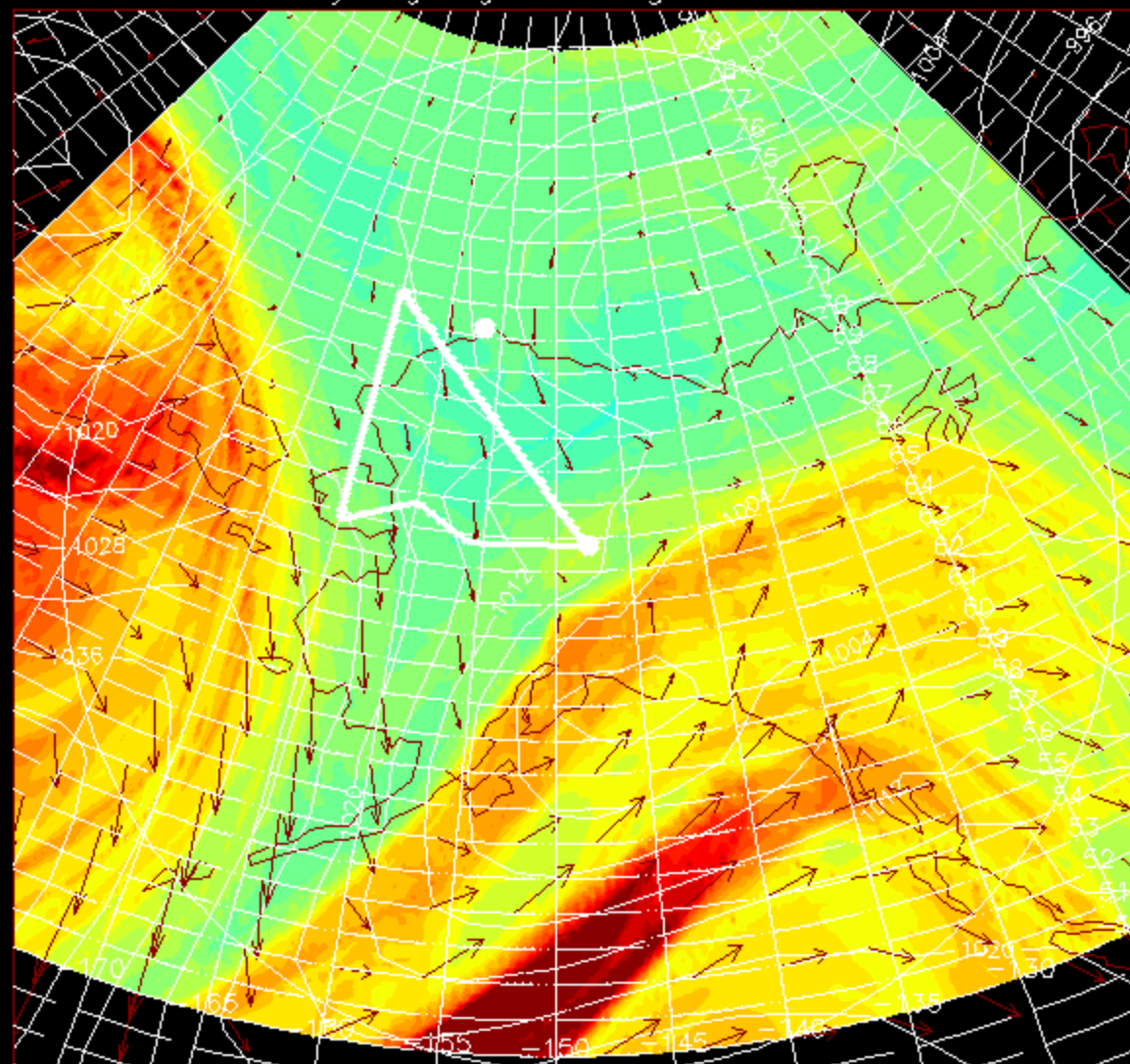
(Pressure Contoured/SFC (white) Trop (black) Intersection Dashed/95% Convective Precip=Red)



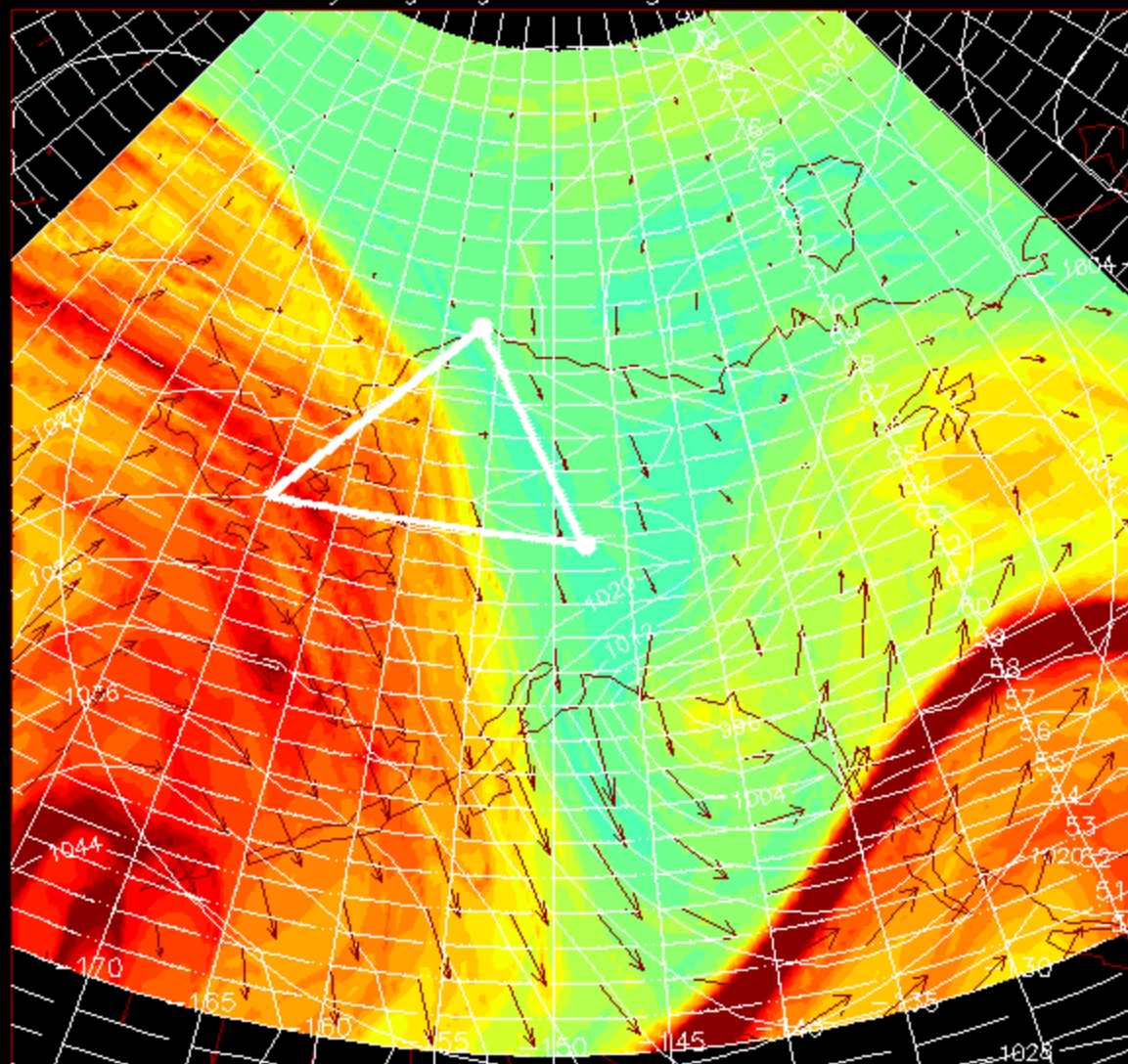
100 150 200 250 300
(ppbv)

RAQMS_G -24hr OMI ASSIM Initialized 12Z 20080413

COL 5-day Lagrangian Averaged CO 2008041600



COL 5-day Lagrangian Averaged CO 2008041700



100

120

140

160

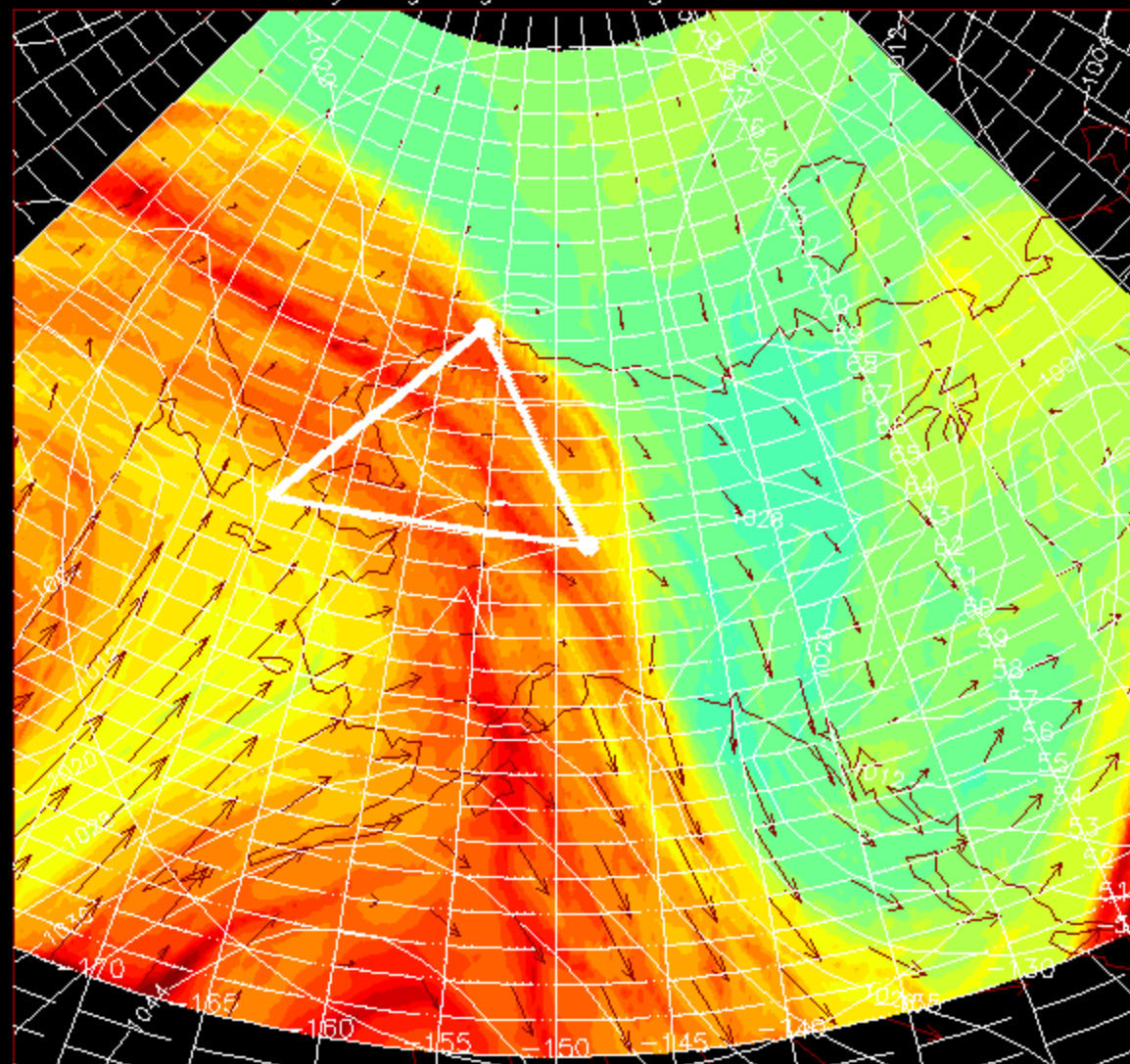
180
(ppbv)

200

220

240

COL 5-day Lagrangian Averaged CO 2008041800



100

120

140

160

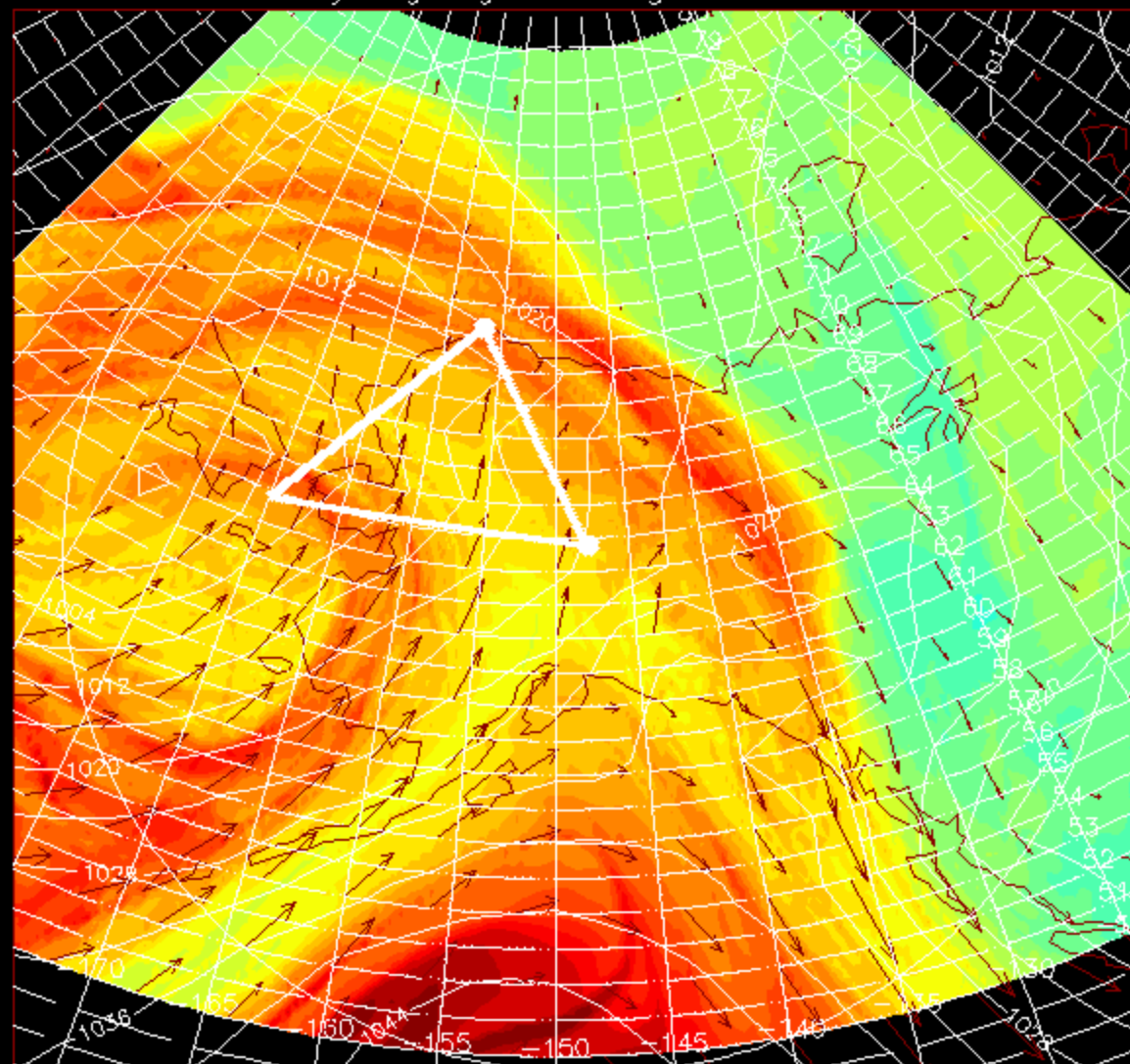
180
(ppbv)

200

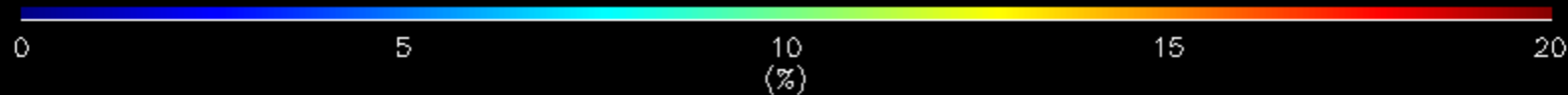
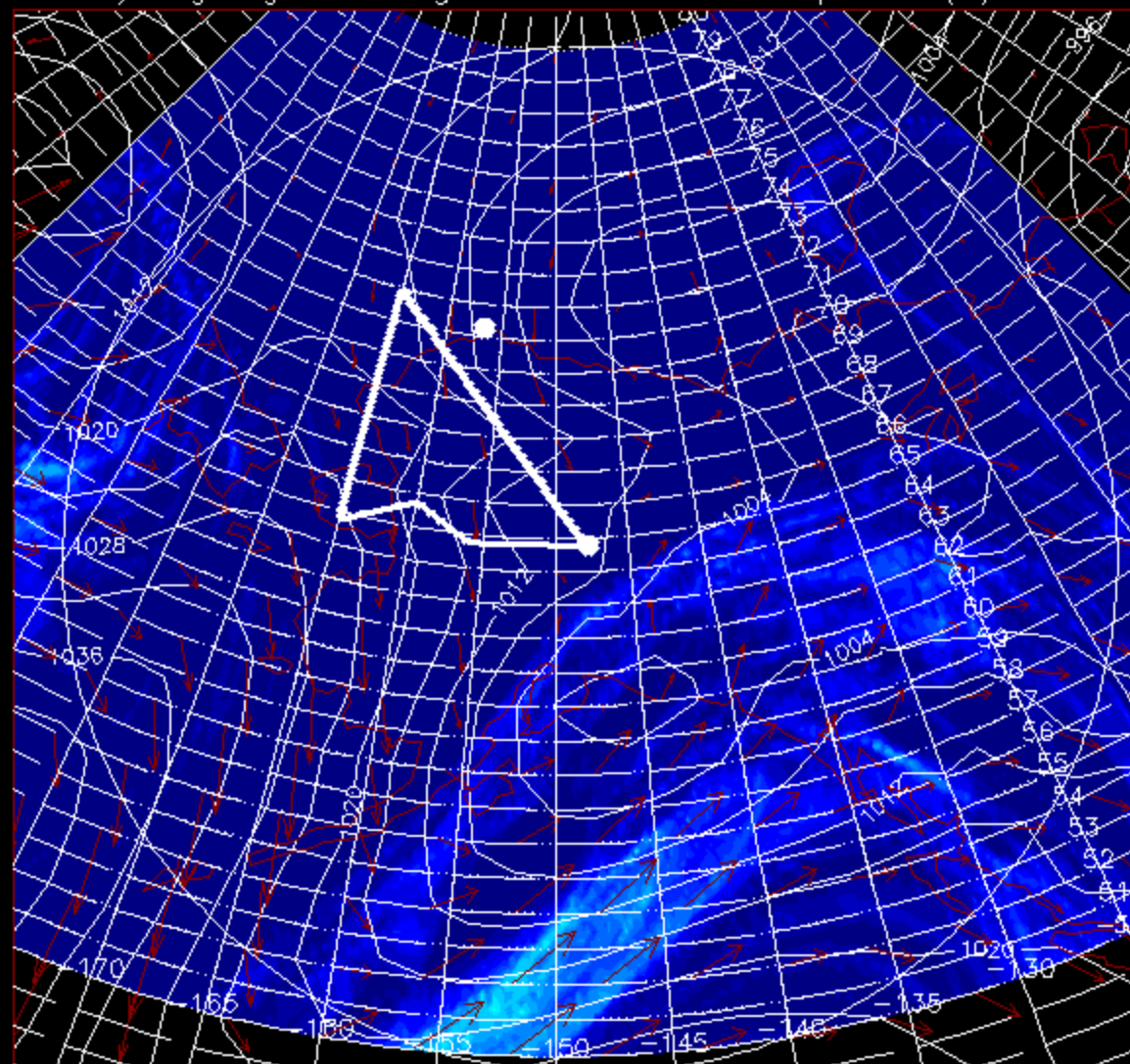
220

240

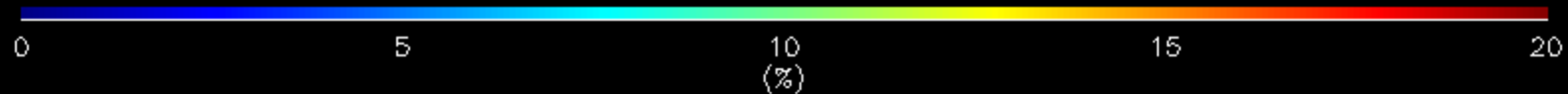
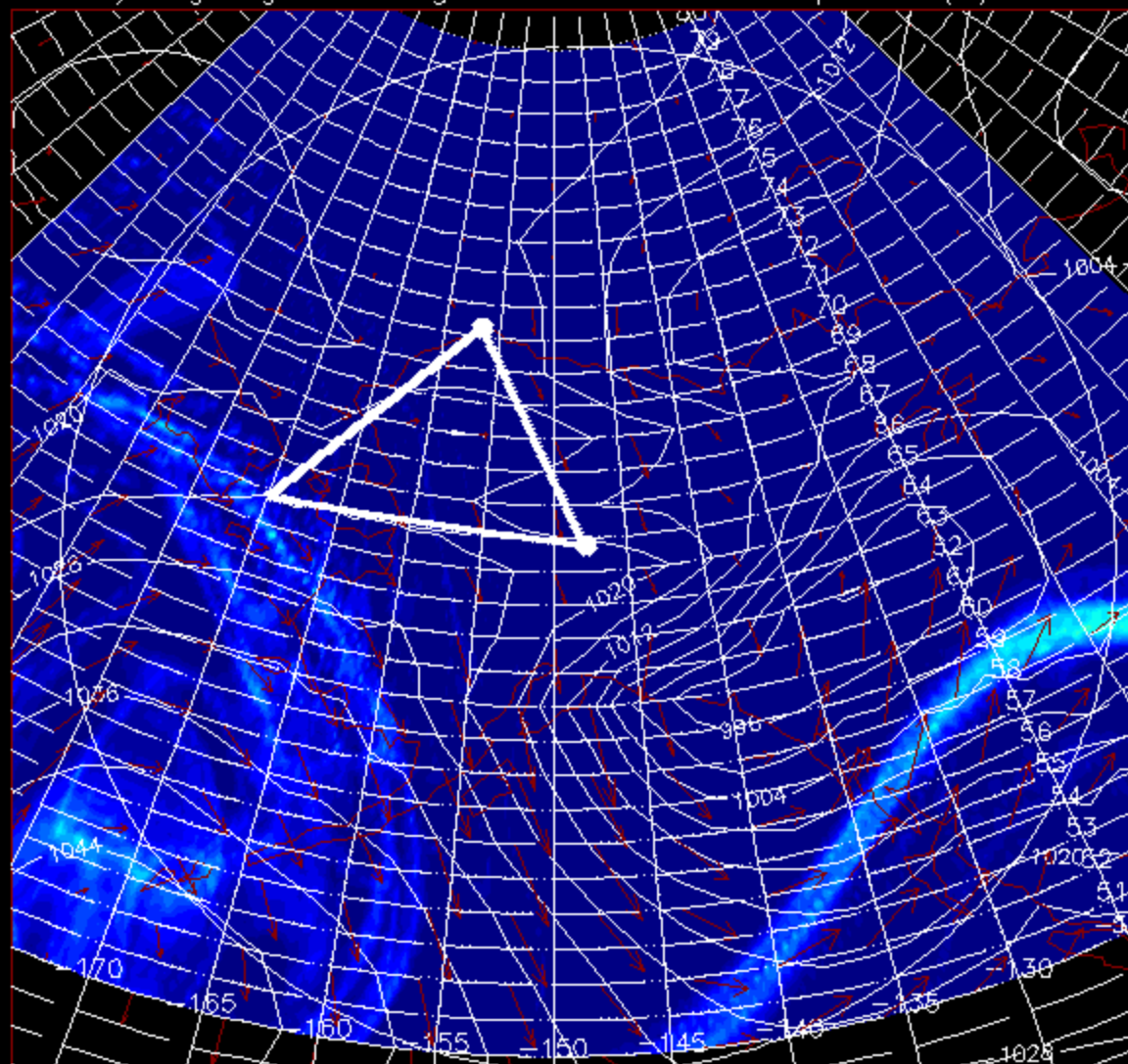
COL 5-day Lagrangian Averaged CO 2008041900



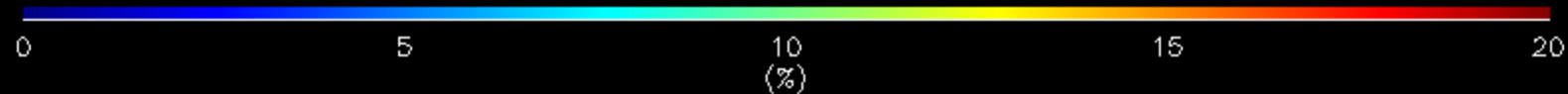
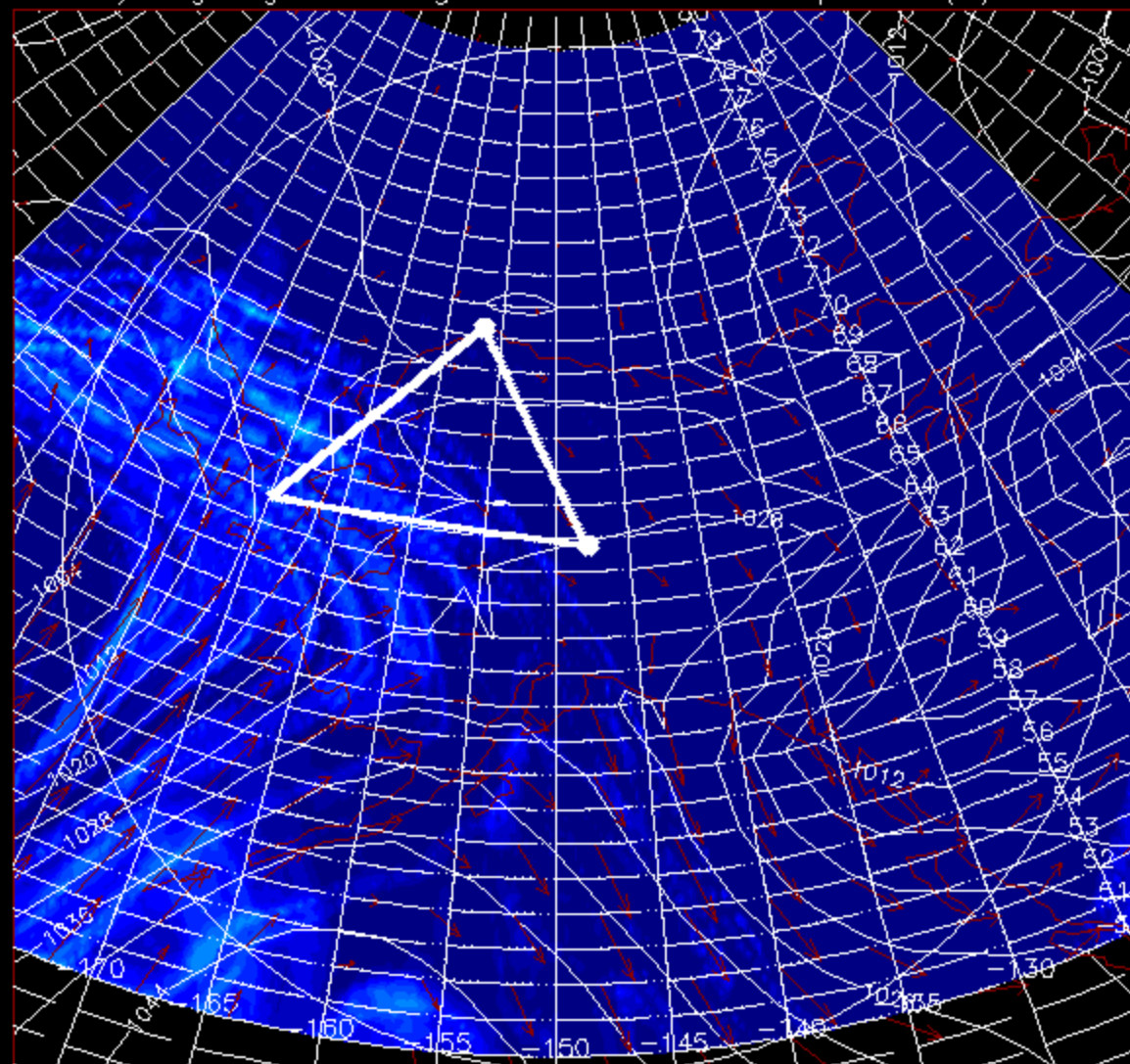
COL 5-day Lagrangian averaged Continental PBL Exposure (%)2008041600



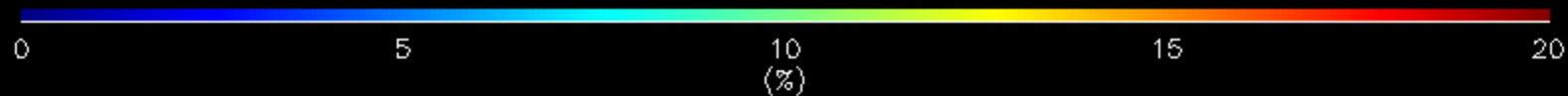
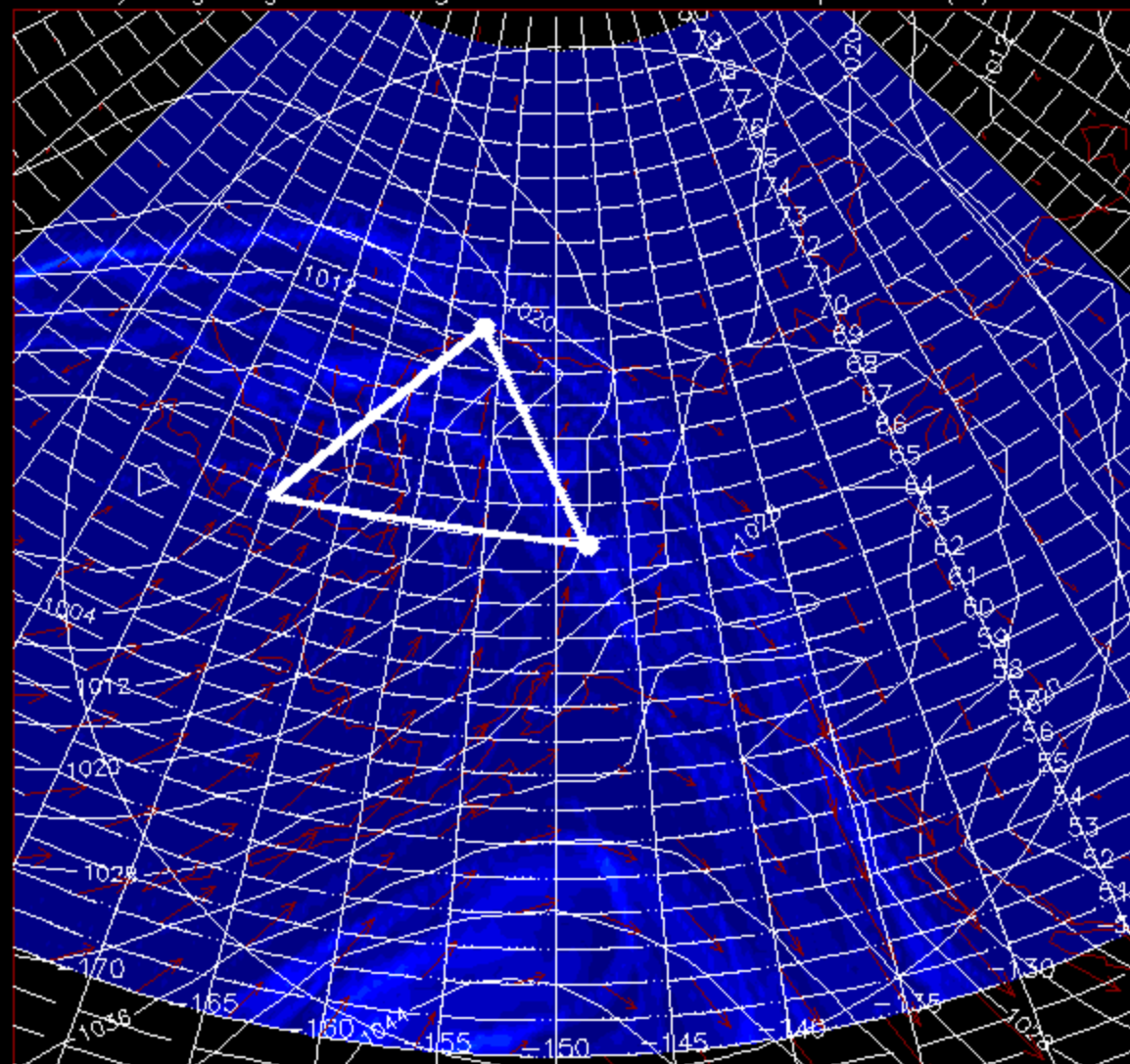
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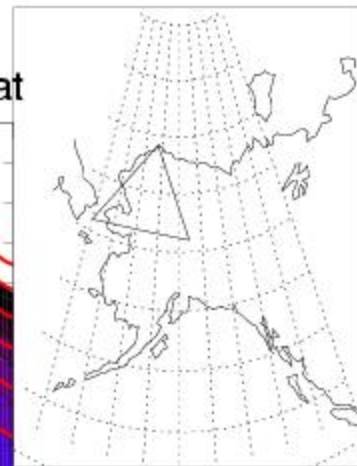
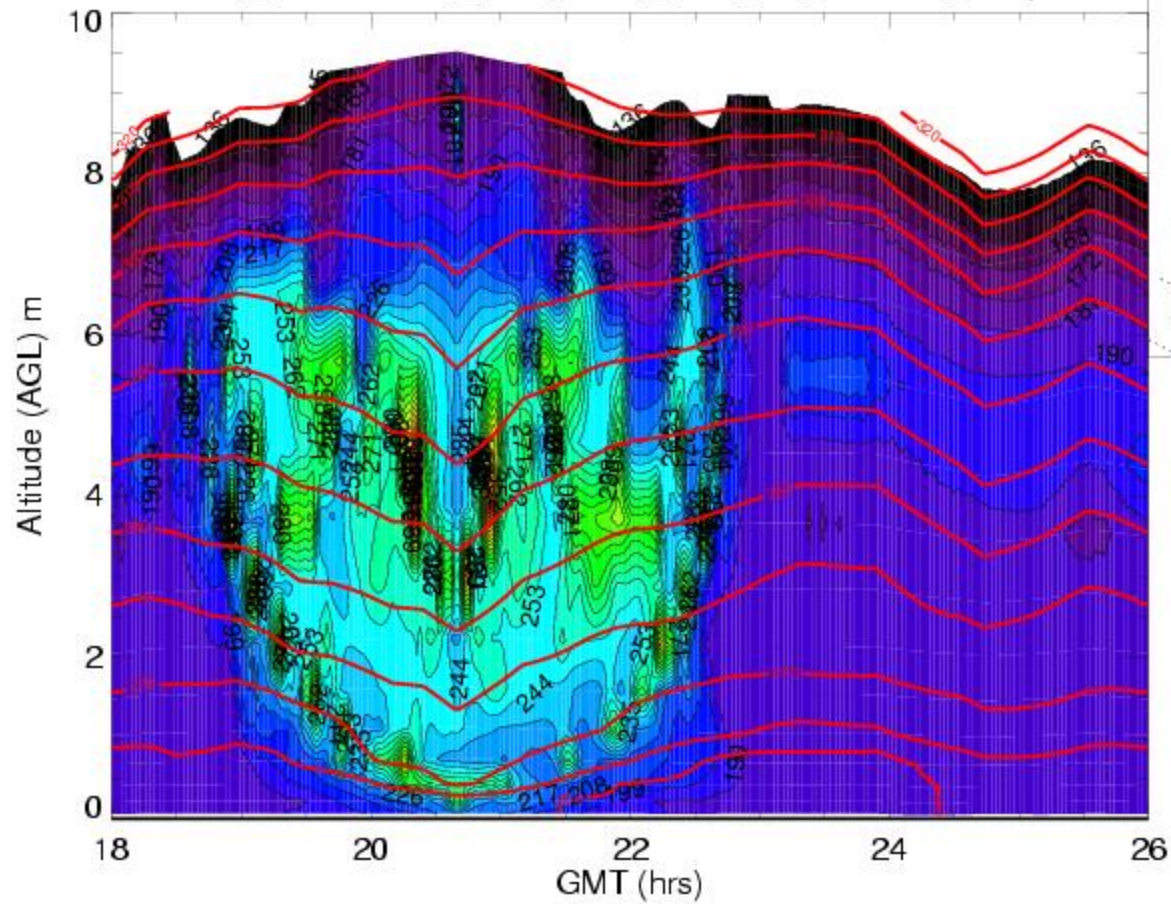
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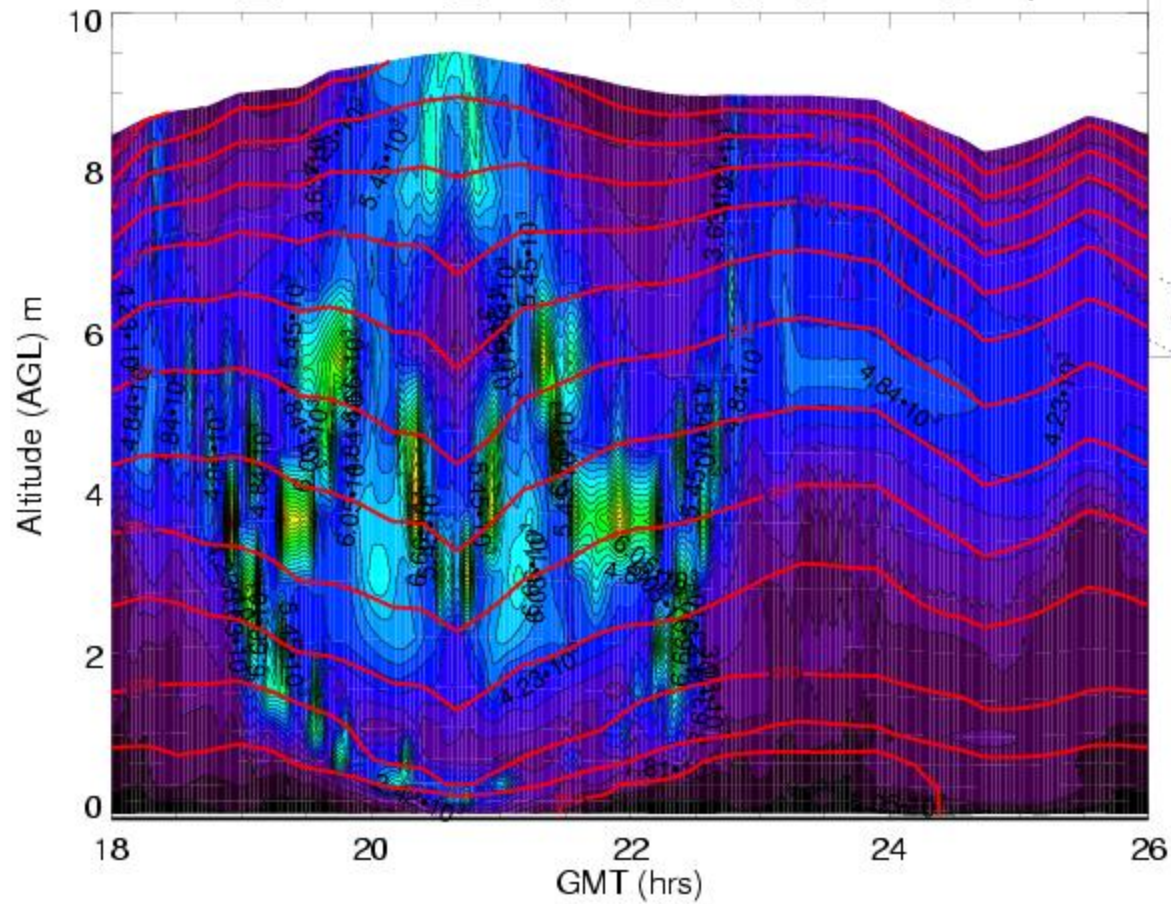


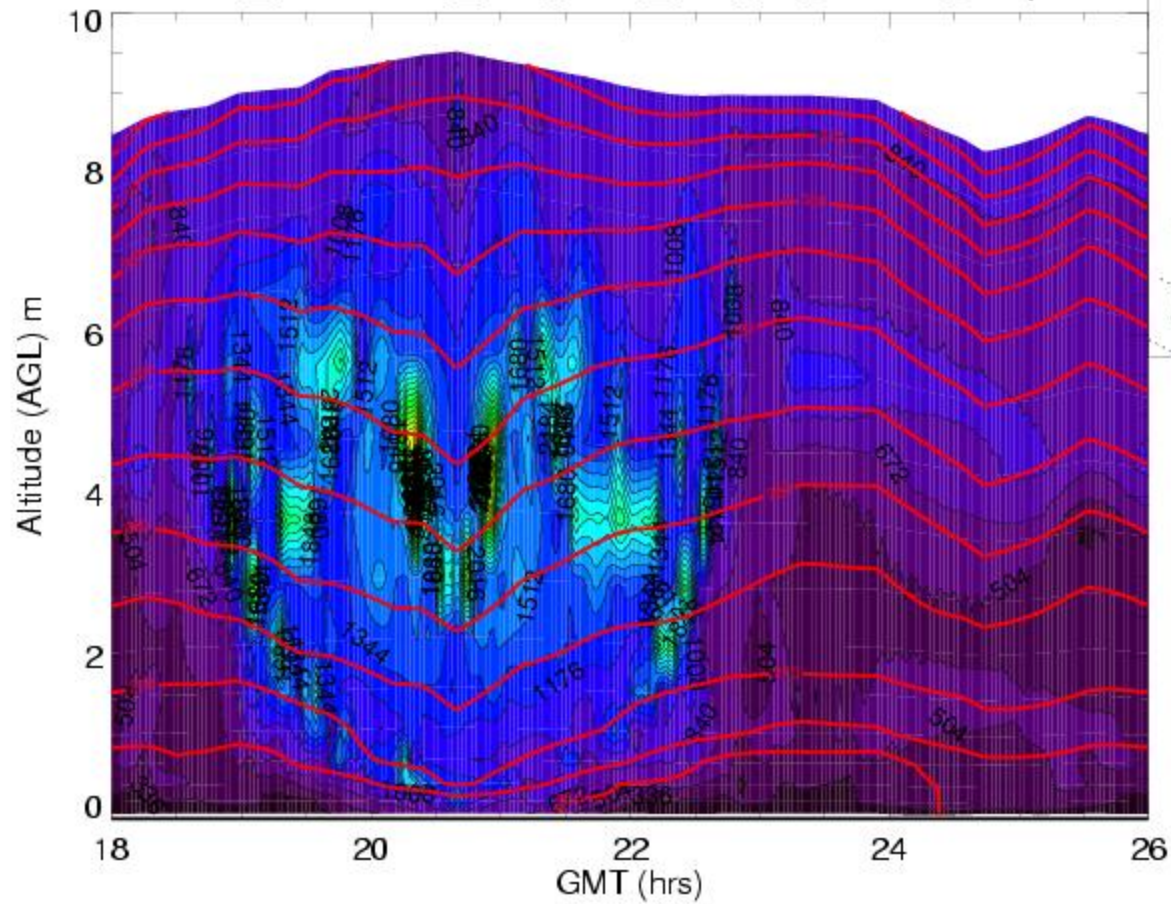
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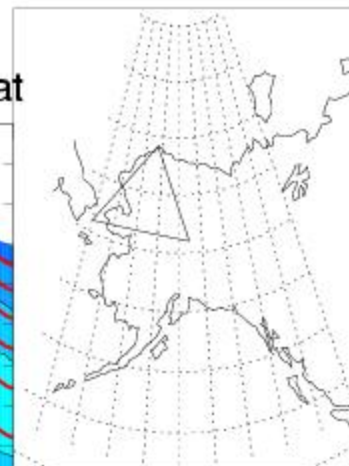
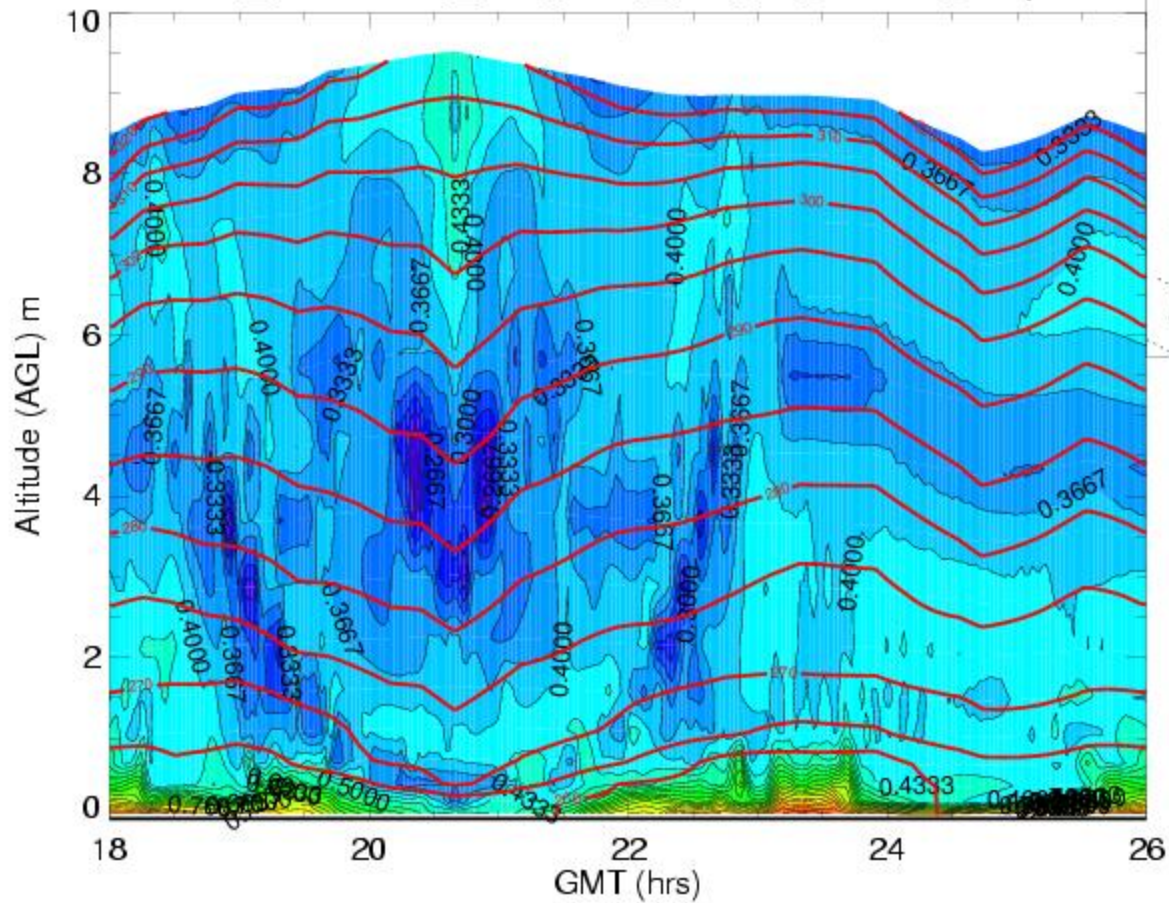
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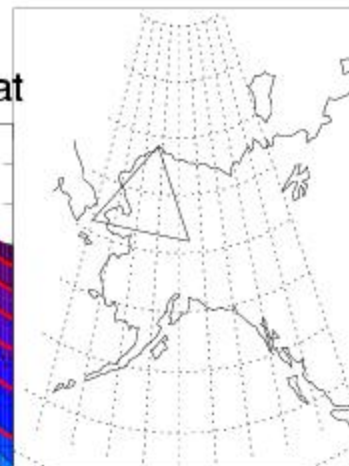
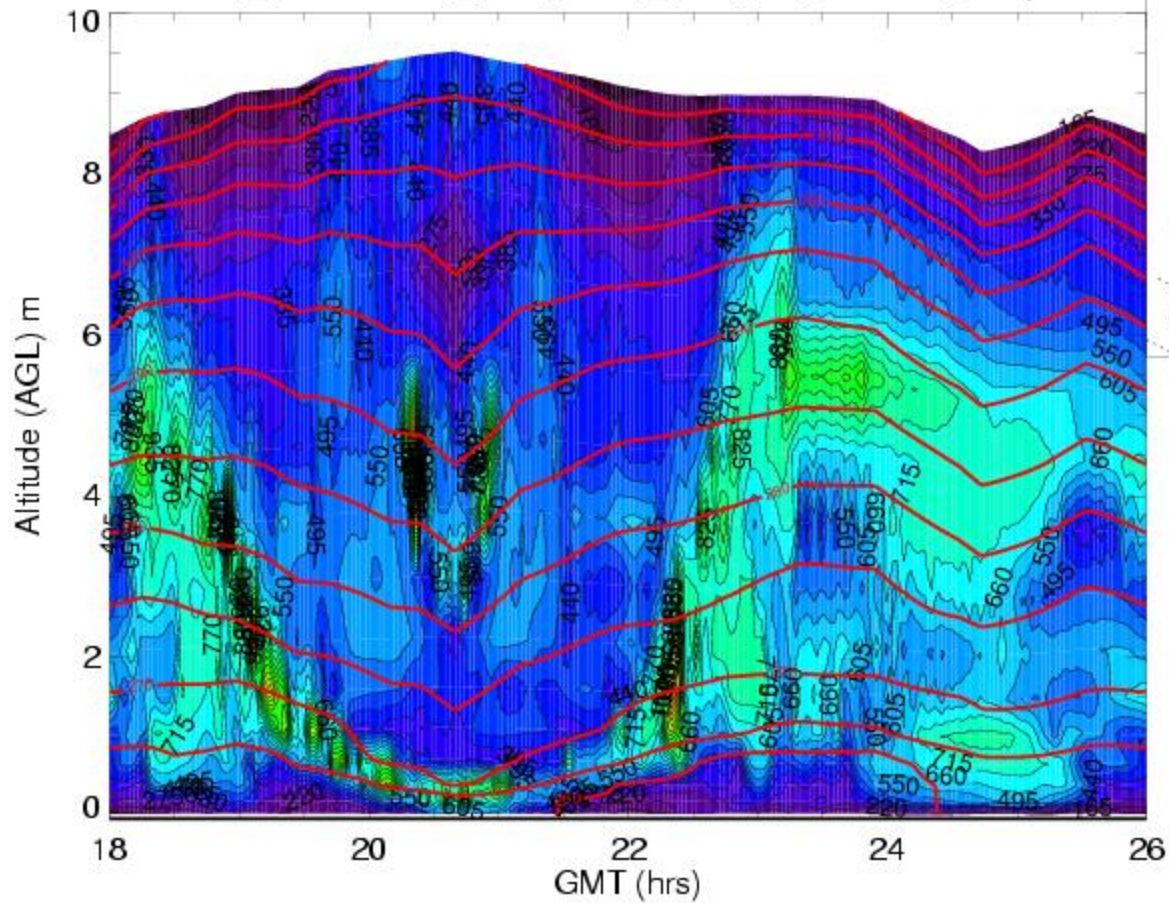




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60hr FX iso4 Cl= 55.0000 max= 1659.38
RAQMS_20080417_00Z_60hr_fcst_rdf_curtain_arcpac.dat



60hr FX idust CI= 4.00000 max= 137.094
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